REPORT RESUMES

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STORING AND SEARCHING READING RESEARCH BY COMPUTER.

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DESCRIPTORS- *READING RESEARCH, *INFORMATION RETRIEVAL, *INFORMATION DISSEMINATION, *INFORMATION CENTERS, *CLEARINGHOUSES, INFORMATION STORAGE, COMPUTERS, NETWORKS,

A PROJECT INVOLVING STORING AND SEARCHING READING RESEARCH BY COMPUTER WAS CONDUCTED (1) TO IDENTIFY, COLLECT, AND ORGANIZE A BASIC CORPUS OF RESEARCH DOCUMENTS FROM THE PUBLISHED RESEARCH LITERATURE ON READING, (2) TO PRODUCE A MASTER FILE MAGNETIC TAPE CONSISTING OF CITATIONS AND ANNOTATIONS FOR COMPUTER STORAGE AND MANIPULATION, (3) TO DESCRIBE THE INFORMATION NETWORK AND FLOW OF RESEARCH LITERATURE IN READING AND TO IDENTIFY CHARACTERISTICS OF THE DOCUMENTS COMPRISING THE MASTER FILE, AND (4) TO EXPLORE THE FEASIBILITY OF USING THE MASTER FILE AS PART OF THE DATA BASE IN AN INFORMATION RETRIEVAL SYSTEM. IN ADDITION, POSSIBLE RELATIONSHIPS BETWEEN THE PROJECT AND THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC/CRIER CLEARINGHOUSE ON READING WERE EXPLORED. THE 5,380 CITATIONS IN THE GRAY SUMMARIES ON READING RESEARCH WERE PUT ON A MAGNETIC TAPE MASTER FILE AND WERE USED AS THE DATA BASE FROM WHICH TO DEFINE THE CHARACTERISTICS OF THE COMMUNICATION NETWORK IN READING. ONE OF THE TRENDS IDENTIFIED WAS THE INCREASING IMPORTANCE OF THE INTERNATIONAL READING ASSOCIATION IN THE GENERATION OF RESEARCH LITERATURE ON READING. AN ANALYSIS OF THE DATA INDICATED A GRADUAL INCREASE IN INFORMATION ON READING RESEARCH OVER THE PAST FOUR DECADES, WITH MUCH MORE RAPID GROWTH SINCE THE LATE 1950'S. THERE ARE NOW FOUR TIMES AS MANY JOURNALS REPORTING SEVEN TIMES AS MANY ARTICLES ON READING RESEARCH AS THERE WERE DURING THE EARLIER YEARS OF THE GRAY SUMMARIES. THE FINDINGS OF THIS PROJECT, WHEN USED IN CONJUNCTION WITH THE ERIC SYSTEM, APPEAR TO PROVIDE A WORKING BASE FOR THE ESTABLISHMENT OF AN EFFECTIVE SPECIALIZED INFORMATION CENTER FOR READING. REFERENCES AND TABLES ARE INCLUDED. (AUTHOR/BL)

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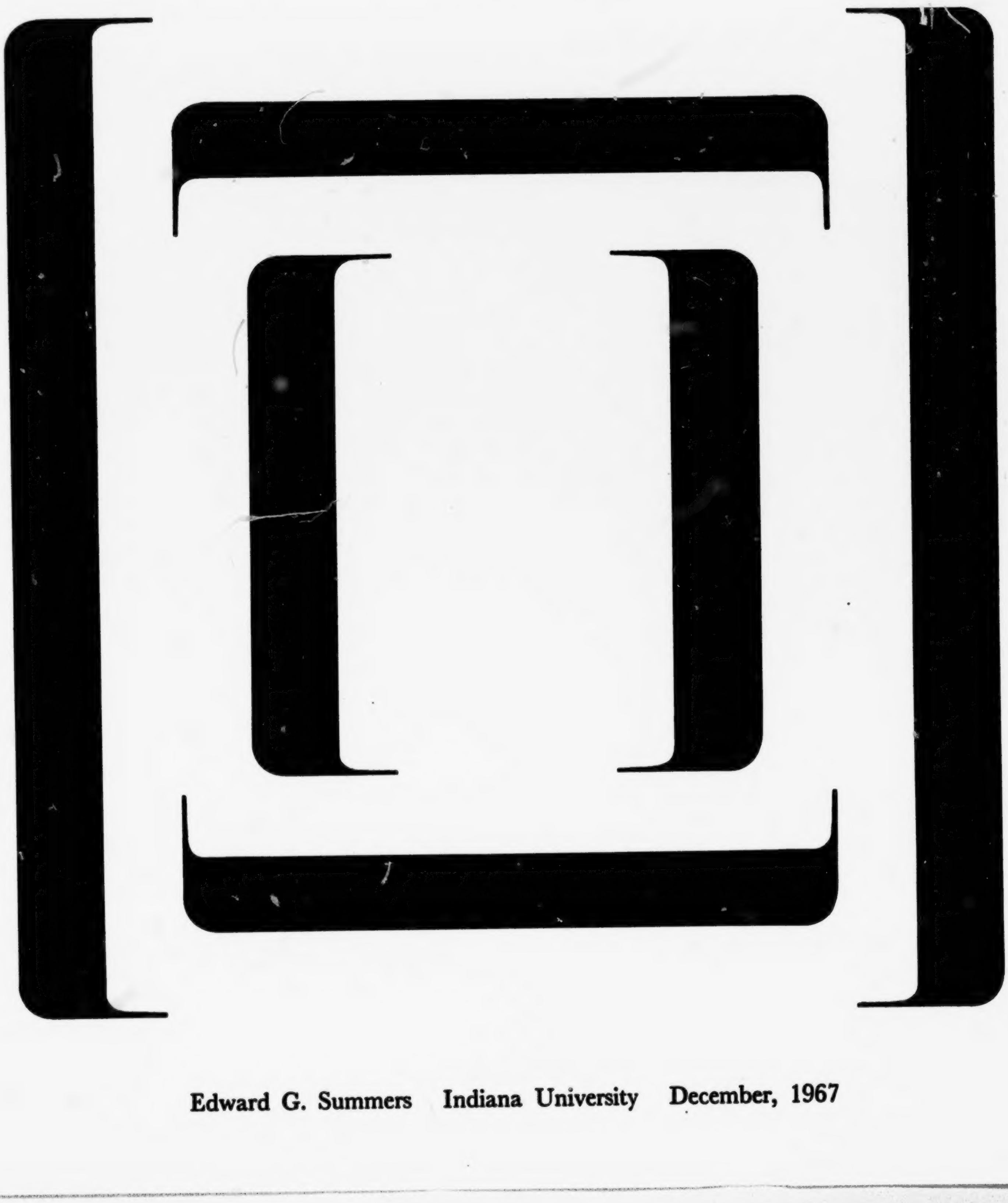

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4384 CLYMER, THEODORE. ''THE UTILITY OF PHONIC GENERALIZATIONS IN THE PRIMARY GRADES,'' THE READING TEACHER, 16 (JAN. 1963), 252-58. REPORTS AN ANALYSIS OF THE PHONIC GENERALIZATIONS PRESENTED IN THE MANUALS OF FOUR BASAL READERS. A ''PER CENT OF UTILITY'' IS COMPUTED FOR EACH GENERALIZATION - A MEASURE OF THE EXTENT TO WHICH IT APPLIED TO WORDS COMMONLY MET IN PRIMARY GRADE MATERIAL.

4385 COLEMAN, JAMES C., AND RASOF, BEATRICE. ''INTELLECTUAL FACTORS IN LEARNING DISORDERS,'' PERCEPTUAL AND MOTOR SKILLS, 16 (FEB. 1963), 139-52. AN INVESTIGATION TO DETERMINE WHETHER UNDERACHIEVERS SHOW A DISTINCTIVE PATTERN OF INTELLECTUAL ABILITIES AS REFLECTED IN WISC SCORES. SUBJECTS WERE 126 UNDERACHIEVERS AND 20 OVERACHIEVERS WITH AN AGE RANGE OF 7.5-16. THE EFFECTS OF I.Q., AGE, AND DEGREE OF RETARDATION WERE EXAMINED SEPARATELY.

4386 CRANE, EDGAR. ''IMMUNIZATION - WITH AND WITHOUT USE OF COUNTER-ARGUMENTS,'' JOURNALISM QUARTERLY, 39 (AUTUMN 1962), 445-50. A STUDY OF THE COGNITIVE AND EMOTIONAL EFFECTS OF ONE-SIDED, IMPLICIT TWO-SIDED, AND EXPLICIT TWO-SIDED MESSAGES ON RESPONSES OF COLLEGE STUDENTS TO TWO ISSUESS. JUVENILE DELINQUENCY AND RECOGNITION OF RED CHINA.

4387 CROOKES, T. G., AND GREENE, MARGARET C. L. ''SOME CHARACTERISTICS OF CHILDREN WITH TWO TYPES OF SPEECH DISORDERS,'' BRITISH JOURNAL OF EDUCATIONAL PSYCHOLOGY, 33 (FEB. 1963), 31-40. TWENTY SUCCESSIVE PUPILS WITH DEVELOPMENTAL SPEECH DEFECTS, AGES 3-6, WERE CLASSIFIED AS HAVING ''MOTOR'' OR ''LANGUAGE'' DISORDERS AND CHARACTERISTICS OF EACH GROUP WERE NOTED. LATER, COMPARISONS WERE MADE OF SUBTESTS ON THE WISC (AFTER AGE 5), ON SCHONELL'S GRADED WORD READING TEST (AFTER AGE 6), OF REVERSALS IN WRITING, OF LATERALITY TESTS, AND KNOWLEDGE OF SIDES.

4388 CRUICKSHANK, W., AND FLOWERS, JOHN F. ''WHITBY-AJAX-PICKERING READING SURVEY AND THE NEW CASTLE READING METHOD,'' ONTARIO JOURNAL OF EDUCATIONAL RESEARCH, 5 (SPRING 1963), 97-112. COMPARISONS WERE MADE BETWEEN READING ACHIEVEMENT IN THREE SCHOOLS USING A TEXT-FILM METHOD OF TEACHING READING AND TWO ADJACENT SCHOOL SYSTEMS USING A CONVENTIONAL APPROACH. ACHIEVEMENT DIFFERENCES WERE TESTED AT EACH OF GRADES 1-4.

4484 ROBINSON, H. ALAN. ''A STUDY OF THE TECHNIQUES OF WORD IDENTIFICATION,'' THE READING TEACHER, 16 (JAN. 1963), 238-42. AN ANALYSIS OF THE ADDITIVE EFFECT ON THE RECOGNITION OF 22 UNFAMILIAR WORDS OF CONTEXT ALONE, WORD CONFIGURATION, PHONIC AND/OR STRUCTURAL ANALYSIS OF BEGINNING ELEMENTS, PHONIC AND/OR STRUCTURAL ANALYSIS OF FINAL ELEMENTS, AND FINALLY THE PRESENTATION OF THE ENTIRE WORD.

4485 ROBINSON, H. ALAN, AND MUSKOPF, ALLAN F. ''HIGH SCHOOL READING - 1961,'' JOURNAL OF DEVELOPMENTAL READING, 6 (AUTUMN 1962), 26-40. THE FOURTH ANNUAL SUMMARY OF PROFESSIONAL LITERATURE ON JUNIOR AND SENIOR HIGH SCHOOL READING.

4486 ROBINSON, HELEN M. ''SUMMARY OF INVESTIGATIONS RELATING TO READING, JULY 1, 1961 TO JUNE 30, 1962,'' THE READING TEACHER, 16 (JAN. 1963), 285-322. ANNOTATED BIBLIOGRAPHY OF 180 ITEMS AND A SUMMARY OF THE RESEARCH REPORTED IN THEM.

4487 ROBINSON, HELEN M., AND SMITH, HELEN K. ''READING CLINIC CLIENTS - TEN YEARS AFTER,'' ELEMENTARY SCHOOL JOURNAL, 63 (OCT. 1962), 22-27. A FOLLOW-UP STUDY MADE IN 1958 OF 44 PERSONS WHO FIRST ATTENDED THE CLINIC AT THE UNIVERSITY OF CHICAGO IN 1948. INFORMATION CONCERNING ACADEMIC ACCOMPLISHMENTS AND/OR OCCUPATIONAL STATUS WAS OBTAINED THROUGH INTERVIEWS AND QUESTIONNAIRES SENT TO FORMER CLIENTS AND THEIR PARENTS.

4488 RUSSELL, DAVID H., AND SAADEH, IBRAHIM Q. ''QUALITATIVE LEVELS IN CHILDREN'S VOCABULARIES,'' JOURNAL OF EDUCATIONAL PSYCHOLOGY, 53 (AUG. 1962), 170-74. REPORTS RESULTS OF ADMINISTERING AN EXPERIMENTAL QUALITATIVE VOCABULARY TEST, CALLING FOR FUNCTIONAL, CONCRETE, OR ABSTRACT CORRECT DEFINITIONS, GIVEN TO 257 PUPILS IN GRADES 3, 6, AND 9 TO DETERMINE WHETHER SIGNIFICANT CHANGES IN LEVEL OF RESPONSE OCCURRED AT THE DIFFERENT GRADES.

STORING AND SEARCHING READING RESEARCH BY COMPUTER

Cooperative Research Project No. OE-5-10-224

Edward G. Summers

Principal Investigator

Indiana University

Bloomington, Indiana

December, 1967

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PREFACE

The project reported here was initiated by the principal investigator while he was a faculty member in the School of Education, University of Pittsburgh. After beginning the project the investigator joined the faculty of the School of Education, Indiana University. However, all fiscal and operational aspects of the project remained at the University of Pittsburgh. The investigator wishes to express appreciation to the staff of the Computation Center of the University of Pittsburgh and to Deans Paul Masoner and Jack Birch of the School of Education for their assistance in bringing the project to satisfactory completion in spite of the complications involved in attempting to conduct a research project "long distance" through two academic institutions.

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Figure 1 Information network output - articles

Figure 2 Comparative size of articles reported

Figure 3 Comparative size of articles

INTRODUCTION

The Information Crisis

Education, like other disciplines, faces an information crisis. That there is an overwhelming increase in the amount of printed materials in this country is indisputable and the number of books, magazines, newspapers and journals published is growing at a rapid rate. It has often been pointed out that information is printed and disseminated in such quantities that, unless systematic techniques are developed to organize it, man will soon be overwhelmed by the sheer quantity of printed materials (1). Professionals in all fields are becoming increasingly occupied with questions related to the generation, transformation, storage, retrieval, analysis and use of information. This is indicated by the greater number of texts and reports available on information science which not only describe the growth of the printed media, but also attempt to cope with its organization and dissemination. The very existence of the Educational Resources Information Center (ERIC) testifies to efforts to deal with the problem in education.

In 1966 one of the fundamental issues discussed in the literature on information science was whether or not a national information problem, which could be termed an explosion, indeed existed (2). While many authorities have accepted the term explosion, Licklider (1966) preferred to describe what has been happening in the technical and scientific communities as a flood rather than an explosion. Licklider maintained that the amount of information has been progressively increasing for a long time and is now "overflowing" in some areas. While the rise in the amount of information has been gradual, the overflow has been sudden and dramatic. It is that overflow, rather than the sudden increase in the volume of information, which has caused alarm. And, as Licklider has so aptly pointed out, if an explosion were to occur, there would be little hope of coping with it. Regardless of whether one would call the ever expanding volume of published materials a flood or an explosion, the issue is not one of terminology, rather it is one of systematic control, organization and dissemination. During the past decade techniques for the collection, storage organization, and retrieval of information have been developing at a marked rate. Recent estimates indicate that the government alone is currently supporting better than 1,300 projects in information storage and retrieval. The responsibilities of the technical community and the government in the transfer of information have been outlined by the President's Science Advisory Committee (1963). The professional field of information science itself has grown considerably -- enough to merit a twelve volume work presenting the major developments in the field (Kent and Lancour, 1967). The number of information facilities established by universities, professional societies, publishing houses, and government and business agencies have mushroomed.

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(1) See, for instance, American Institute of Physics Staff, "Techniques for Publication and Distribution of Information." In Carlos A. Cuadra (Ed.), Annual Review of Information Science and Technology. Interscience Publishers, New York, 1967. pp. 339-384.

(2) This question, and other recent information issues and trends of national significance, receives careful treatment by Hammer (1967).

Marked growth in the quantity of published information has occurred in education as a whole and in the field of reading in particular. Certainly the dramatic growth of the International Reading Association to over 50,000 members and subscribers in a few years is an indicator of increased activity and interest in reading (International Reading Association, 1967). The published literature in the field approaches Licklider's flood stage. The annual summary of research in reading contained 236 entries in 1963-64; in 1966-67, it contained 310 entries -- a growth of about 30% in three years. The U. S. Office of Education has been in large part responsible for the growth of research and published materials in education. Since 1956 when the funding of the Cooperative Research Program began, the Office of Education has administered increasingly broadened research programs. The volume of USOE funded research has been increasing and it is estimated that this support will increase one hundred fold over the next decade. Through the research supported by USOE, questions which have long perplexed educators are being resolved. However, information about educational organization, curricula, methods, and materials has little value unless it is made available to persons who are in a position to apply it: teachers, administrators, and researchers.

Recognizing that sponsoring research in education is only half the job, the Office of Education has assumed responsibility for not only developing methods to cope with the increased volume in terms of collection and storage, but also for analyzing and transmitting this research to educators and others interested in education. Since the inception of the research project reported here, a national system for the collection, storage, retrieval, and dissemination of research and research-related materials in education has been developed: The Educational Resources

Information Center (3). ERIC, the first national comprehensive system designed to serve American education, operates within the Office of Education as a branch of the Division of Research Training and Dissemination, Bureau of Research, and consists of a central coordinating unit and 18 special subject area clearinghouses. In 1966 the Clearinghouse on Retrieval of Information and Evaluation on Reading (ERIC/CRIER) was established at Indiana University as the reading unit within the ERIC system (4).

Objectives of the Project

The project reported here grew out of the recognized need to establish a systematic approach to the transformation, communication, storage, retrieval, analysis, and use of the ever expanding research information being generated in the field of reading. Pilot work for developing an information retrieval facility in the field of reading actually began in 1963. The establishment of the ERIC information system provided a vehicle for the natural evolution of the concepts developed in the research reported here. The project on storing and searching reading research by computer had four major objectives:

1) to identify, collect, and organize a basic corpus of research documents from the published research literature on reading;

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(3) The concept of the Educational Resources Information Center and suggested strategies for implementing the system are described in Mersel, Jules and others, Information Transfer in Educational Research, ED 010128, EDRS, National Cash Register Co., 4936 Fairmont Ave., Bethesda, Md. 20014, 1966. 193pp.

(4) A complete history of the establishment of ERIC/CRIER and its major objectives can be found in ERIC/CRIER Informational Publications: Cumulative Edition 1966-67, Indiana University, Bloomington, Sept., 1967.

2) to produce a Master File magnetic tape, consisting of citations and annotations, for computer storage and manipulation;

3) to describe the information network and the flow of research literature in reading and indicate salient characteristics of the documents comprising the Master File; and

4) to explore the feasibility of using the Master File as one part of the broad data base in an information retrieval system.

A fifth, implicit objective was added after the project started: to indicate how the project relates to and can be utilized by the newly created ERIC information system and the ERIC/CRIER Clearinghouse on Reading.

THE BASIC CORPUS OF RESEARCH DOCUMENTS

Information retrieval systems employ a number of basic processes: the identification and collection of information, the storage of information, the analysis of information, and the ultimate retrieval and dissemination of information in response to user needs. The first process, the identification and collection of information, is perhaps the most crucial and often the most difficult step to achieve satisfactorily in the information processing chain. However, the eventual effectiveness of any information facility is directly related to the breadth and scope of the acquisitions program and the number of relevant, useful documents acquired. Thus, comprehensive acquisitions programs must be developed to insure that useful documents will enter the system. As the various ERIC Clearinghouses have begun operation, their immediate task has been the identification of the information sources to be monitored for documents which should enter the system. In fact, an analysis of document sources and their availability, in most instances, preceded the decision to establish any one ERIC clearinghouse. Various genres of research documents could be included in the basic corpus of material for any information facility in education: 1) research which has appeared in the published journal literature, 2) reported doctoral dissertations, 3) research projects sponsored by the government or foundations, and 4) research which has been reported in published or unpublished documents not incorporated in the previous sources. Although the ERIC clearinghouses deal with documents in each of the above areas the research project reported here concentrated on one source of research information -- the published journal literature containing research reports on reading. This project was initiated and largely completed prior to the creation of the ERIC system. With the development of ERIC/CRIER, the document collection was naturally incorporated into the concept and development of the Clearinghouse on Reading.

Source and Characteristics of the Document Corpus

In attempting to identify basic published research literature in reading, the investigator was fortunate in being able to use the resources of a comprehensive, sequential, longitudinal project which has identified, collected, organized and disseminated information on reading research for the past forty years. The Reading Research Center of the University of Chicago has been systematically collecting published research literature relating to reading since the early 1900's. The files of the Center, and the yearly reviews of research in reading which have been published in professional journals, constitute the William S. Gray collection - the most complete collection of current and retrospective published research documents available in any domain of the field of education.

The first research summary in the collection was published by Gray in 1925. In it, Gray reported 436 research articles relating to reading from the late 1800's to June 30, 1925. This first summary established the pattern for future summaries and included books, monographs and serial and non-serial literature. The 1925 summary was divided into two basic sections: Part I organized the research under various categories and discussed the research reported; Part II contained a complete bibliography of the research reported along with a brief descriptive annotation for each entry. In 1926 the summary was produced on a yearly basis and appeared in the Elementary School Journal until 1932. In 1933, although the format remained basically the same, the summary began to appear in the Journal of Educational Research and remained there until 1962. After the untimely death of Gray in 1960, Helen M. Robinson, currently Director of the University of Chicago Reading Research Center, took over the preparation of the summary. From 1962 until 1964 the summary was published in The Reading Teacher; in 1965 it changed to the Reading Research Quarterly where it now appears yearly in the Winter issue (5).

Throughout its long history, the annual summary has provided a comprehensive review and tabulation of research reported in the field of reading (6).

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(5) A complete list of the journals in which the annual summary has appeared is contained in the Appendix.

(6) A detailed description of the process followed in preparing the annual summary is provided in the Winter 1965 issue of the Reading Research Quarterly.

In recent years, however, the volume of research has increased to such proportions that a comprehensive listing has become virtually impossible in one publication. Thus, recent summaries have been more selective and less encyclopedic. This has not detracted from the value of the summaries. While other useful and briefer reviews (Laffey, 1967) of research in reading have been published, the annual summary remains as the most comprehensive review of research covering the longest time span on a continuous basis.

The value of such a yearly summary cannot be overestimated. It has and will continue to serve as a unique vehicle to keep teachers, administrators, graduate students, research workers and others abreast of the entire field of reading. It is invaluable as a tool to: 1) collect, screen and consolidate research in reading; 2) integrate past with current knowledge; and 3) publicize problems, advances and developments in the field. The project reported here uses the yearly summaries as its basis. It represents the first attempt to work with the total corpus of research material, assess the utility of using the summaries as part of the data base for information retrieval, and define some of the salient characteristics of the document collection.

Obtaining and Organizing the Material

The first step in the project was to obtain a complete set of the journals which contained the annual summaries. On the surface, this appears a relatively simple task. However, compiling a complete set of serial publications covering a long time period can be a difficult endeavor -- as any librarian - collector knows. Dr. Theodore Clymer of the University of Minnesota had assembled, through diligent search, purchase and reproduction, a complete set of the journals carrying the annual summaries. The collection was enthusiastically contributed for use in the project. Dr. Clymer also gave invaluable advice and assistance throughout the project in coordinating with the Reading Research Center of the University of Chicago, arranging for permissions to use the materials, and serving as a continuing sounding board for various aspects of the work as the project developed.

Once the journals containing the yearly summaries were collected, the material was organized prior to preparing it for computer input. The complete bibliography for each yearly summary, including the citation data and the annotation, was used. It was decided that the best technique would be to prepare the material in year by year units and maintain the format of the original bibliographies throughout. Thus, each year was arranged alphabetically by author for encoding. The only major departure from the format of the original bibliographies was to number the entries consecutively across all years of the collection. This number provided an identification code and also proved useful as an accession number for later use in the retrieval system for ERIC/CRIER. Instructions were prepared, with appropriate marginal notations of the source materials, indicating to the typist the sections of the content to be transcribed. Thus, only limited editing of the source material was necessary.

In organizing the material that would eventually appear on magnetic tape the only constraint was to develop the tape so that it would be as flexible in format as possible for eventual use in exploring its potential as the basic corpus of material in a retrieval system. Once the magnetic tape was developed a complete printout of the contents was available. In addition, certain by-products became available through simple computer programing routines. An alphabetical and descending frequency list of the vocabulary of the titles and annotations of the summaries was one immediately useful product. In addition, a document concordance based on the vocabulary of the summaries, providing access to the documents related to specific terms or combinations of terms, was also available.

TRANSCRIPTION TO MAGNETIC TAPE

In transcribing typographical data into machine readable form, two input devices are commonly used: the card punch and the tape punching typewriter. It has been predicted that visual-manual methods of transcription such as these will soon become obsolete. Electronic equipment to "read" printed documents directly and convert their text to magnetic tape will eventually become available. Optical scanning devices are already in existence which will recognize alpha-numeric characters, presented in formats using specially prepared input materials, and convert them into machine readable codes. Punched cards and paper tape, nevertheless, remain the two major tools currently available for transcription of bibliographic data into machine readable form until the day when optical character recognition is a reality. The transcription phase still remains the most time consuming and expensive process in document storage and retrieval and language analysis via computer.

Paper Tape as the Input Medium

The basic purpose of transcription of the Master File was to adapt essentially unedited biographical source material to the process of automatic storage and searching by computer techniques. It was decided to use paper tape for transcription via the Friden Flexowriter. Both card punches and tape-punching typewriters have recognized limitations as input devices for typographical data. The keyboards of both are restrictive, but the typical card punch is more restrictive with its limited monocase keyboard of 47 characters. The paper tape typewriter has the broader flexibility of an 88 character keyboard, although this too has to be supplemented with special symbols to accommodate the variety of citations handled in bibliographic processing. Paper tape eliminates the fixed fields of punched cards and avoids restrictions in length of the elements stored. With paper tape, elements can be extended or contracted to whatever length is desirable. Editing is also facilitated with paper tape since the typewriter provides a by-product printout in essentially the same format as the original material for match editing. Finally, little special operator training is required as a competent typist can rapidly develop proficiency in flexowriting bibliographic material.

Blocking the Entries

The Master File, across the years of the annual summaries, includes 5,380 entries. In transcribing the entries each was considered a separate unit. A sample of a typical entry in its original printed format reads as follows:

> Mallinson, George E., Sturm, Harold E., and Mallinson, Louis M. "The Reading Difficulty of Textbooks for General Science," School Review, LX, (February, 1952), 94-8.
>
> Reports the results of the application of the Flesch Readability formula, involving a modification of the sampling technique, to 16 scientific textbooks, previously not studied for readability, to determine if their difficulty was higher than the grade level of the pupils for whom the books were intended.

Three decision factors were involved in "blocking" the material for machine input: 1) the number of segments in the entry (title, author, annotation, etc.); 2) the sequence of the segments (author and citation data precedes annotation, etc.); 3) typographical details to be transcribed (italics, boldface, quotes, etc.). The blocked form of the above entry appears as follows:

3133 1. MALLINSON, GEORGE E., STURM, HAROLD E., AND MALLINSON, LOUIS M.

2. "THE READING DIFFICULTY OF TEXTBOOKS FOR GENERAL SCIENCE,"

3. SCHOOL REVIEW, LX, (FEBRUARY, 1952), 94-8.

4. REPORTS THE RESULTS OF THE APPLICATION OF THE FLESCH READABILITY FORMULA, INVOLVING A MODIFICATION OF THE SAMPLING TECHNIQUE, TO 16 SCIENCE TEXTBOOKS TO DETERMINE IF THEIR DIFFICULTY WAS HIGHER THAN THE GRADE LEVEL OF THE PUPILS FOR WHOM THE BOOKS WERE INTENDED.

The information is recorded as to function rather than style, thus permitting use of the tape for a wide variety of purposes. The basic element in the system is the single document datum, which consists of four parts of varying length, and which can be conceived of as a manipulable unit of information. The datum is composed of the segments labeled code number-author, title, source information, and annotation for the single entry in the Master File. Each datum is ascribed to a particular year and is arranged alphabetically by author within that year. With the addition of a classification scheme or human or machine indexing of some type, the entries could be arranged in an almost infinite number of combinations, depending on the depth of indexing or the breadth of classification, to produce printout bibliographies.

Producing and Editing the Paper Tape

In transcribing the material to paper tape, the Flexowriter operator followed conventional procedures and was instructed to type a complete replica of the format of the bibliographic entries. Throughout, the instructions were to "reproduce exactly as printed." The keyboard of the Flexowriter is generally adequate for this task but, in some instances, special ad hoc symbols had to be constructed to escape the limitations of the typewriter keyboard in transcription of printed material. A small number of additional symbols enabled the operator to meet the requirements for machine handling of the format of the bibliographic entries being processed. The ad hoc symbols were developed as mnemonics so as to require little discrimination on the part of the operator with existing commonly used symbols. The symbols were keyed by the operator as needed and verified by inspection of the hard copy by-product.

One of the major costs in the document to tape transcription process is the text editing required to achieve a high level of accuracy. Accuracy from the printed page to the machine readable medium depends on the accuracy of the transcription made by a humanly operated machine. Proofreading was necessary to check the accuracy of the input device and the operator. Machines are prone to malfunction and keyboard operators do make errors. The following steps were followed in producing and editing the paper tape and developing the magnetic tape Master File.

Phase 1. The source material, with marginal editing, was given to the Flexowriter operator and transcribed using the available 88 character typewriter font and supplementary symbols. Tape A and Hardcopy 1 by-product were produced.

Phase 2. Hardcopy 1 was proofread for machine and typist errors using the source material as a match.

Phase 3. Tape A was read through the Flexowriter again, producing Tape B on which all errors were corrected. The operator merely stopped punching where errors occurred and retyped the error by hand. Hardcopy 2 of the corrected Tape B was produced as a by-product and served as a match for proofreading.

Phase 4. Tape B was used to produce cards which were used to generate the magnetic tape, Tape C, through a special program. A hardcopy printout was developed of the material stored on the magnetic tape for additional proofreading.

Printouts from the Magnetic Tape

Tape C can be used to drive a computer generated printing device. Several types of printout are possible. At the most elegant extreme of the continuum, type composition equipment such as the Photon could be used. This would provide copy with boldface and lightface type, Roman and italic fonts, lower and upper case, caps, and underlining. At the modest end of the contiuum, output from the crude, dependable standard line printer with its monocase font is available. Although the corpus of material constituting the Master File in this project was used in experimental work with Photon automatic typesetting equipment, the eventual printout produced appears in typical monocase form from the standard line printer (7).

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(7) A description of activities with automatic Photon typesetting is contained in Roudabush *et al*, (1965).

The magnetic Tape C was used to develop the Master File printout bibliography of the total document corpus. Sample pages of the printout bibliography appear as the first and last pages of this report. A Vocabulary Frequency List was also prepared. For this list a computer program was prepared and used to collect and alphabetize all the words contained in the titles and annotations of the entries. In processing, the frequency of each word's occurrence and its location in the document file was also tabulated. With editing to eliminate articles, common prepositions, conjunctions and numbers, the printout provides a rough approximate sample of frequently used words in reading research. A Vocabulary Concordance was also generated. The concordance lists each word in the edited Vocabulary Frequency List and the document numbers where the word appears in the title or annotation. All three printouts can be used as tools in indexing or searching the document collection.

CHARACTERISTICS OF THE INFORMATION NETWORK IN READING

Few attempts have been made to define the characteristics of the information network in reading or attack the problem of information exchange within the network. The published research literature in the Master File forms part of the information network and also serves as a storage mechanism for reading research articles. The Master File provides a valuable resource which can be manipulated in information retrieval activities. However, it can also serve another vital function. It can be analyzed to clarify the outlines of the information network in reading and the manner in which communication and information exchange take place. The Master File was used to:

1. Indicate the total number of messages appearing (articles)

during a finite time (approximately 1900 to 1966) and the pattern of increase in the number of messages over the time period. (Information Network Output)

2. Compare the publication of messages of varying length during the finite time period and the pattern of increase in the number of messages of varying length over the time period. (Comparative Size of Messages)
3. Contrast the total number of messages published during the finite time period by decade units and identify the most productive journals in terms of volume of messages published. Specify some set of journals as the core publications in the reading network. (Core and Peripheral Journals)

The research methodology involved tabulating two types of data - journals carrying reading research and the articles published in those journals - and is restricted to conclusions based on this technique. The total document corpus used in this project is not representative of the total of all possible documents existing on reading research. However, it is a reasonably complete sample of the published journal literature portion of all possible documents on reading research for the time period covered. The data base is limited by the principle of selectivity operating during any one of the years in which the Gray summaries were published.

Information Network Output

Assuming that part of the communication network in reading consists of the journals carrying articles on reading research, the output of the network can be defined as the total number of articles, or messages, produced by those journals during the reporting period covered. Tables 9 through 51 in the Appendix provide a year by year tabulation of the journal titles, the total number of reading research articles published by the journals, and the size of the articles in number of pages. The tables begin with the first Gray monograph published in 1924 and provide data on a yearly basis up to the 1965-66 annual summary. The yearly summaries use July 1 to June 30 as a reporting period so the tables are labeled with cross year dates such as 1927-28. However, each unit includes twelve months of reported literature.

Table 1 summarizes the data reported in Tables 9 through 51. For the period 1884 to 1965-66 a total of 4,159 articles on reading research were reported. The figure is short of the total of 5,380 entries which have appeared in the Gray summaries. However, books and other non-journal materials reported in the yearly summaries were not tabulated. From the beginning of the reporting period until the early sixties a gradual, steady increase is seen in the number of journals carrying articles and the number of articles reported in those journals. Fluctuations in production can be noted in the thirties and forties which were probably generated by social conditions such as the depression and the decrease in academic activity during World War II. In the early nineteen-sixties a slight increase is evident in the number of journals reporting reading research. A marked increase is evident in the overall number of articles reported.

Looking at the data another way, in 1935-36 there were approximately twice as many journals reporting twice as many articles as were recorded during the first years of the summary. This increase holds and gradually expands, with minor fluctuations, until the early 1960's. The 1965-66 summary reports better than four times as many journals, carrying seven

Table 1

Number of articles and journals - reading research literature.

Year	Total no. articles	C/F	Total no. journals
1884-1924	265	265	38
1924-1925	27	292	8
1925-1926	36	328	16
1926-1927	64	392	19
1927-1928	64	456	26
1928-1929	94	550	35
1929-1930	75	625	32
1930-1931	78	703	34
1931-1932	67	770	33
1932-1933	70	840	31
1933-1934	63	903	27
1934-1935	93	996	34
1935-1936	86	1082	35
1936-1937	79	1161	27
1937-1938	82	1243	31
1938-1939	103	1346	39
1939-1940	96	1442	37
1940-1941	90	1532	37
1941-1942	91	1623	34
1942-1943	84	1707	29
1943-1944	51	1758	21
1944-1945	43	1801	22
1945-1946	60	1861	27
1946-1947	71	1932	26
1947-1948	78	2010	39
1948-1949	81	2091	30
1949-1950	87	2178	32
1950-1951	76	2254	29
1951-1952	82	2336	30
1952-1953	97	2433	31
1953-1954	70	2503	31
1954-1955	83	2586	34
1955-1956	89	2675	31
1956-1957	70	2745	31
1957-1958	88	2833	30
1958-1959	111	2944	35
1959-1960	86	3030	22

Table 1 Cont'd.

Number of articles and journals - reading research literature.

Year	Total no. articles	C/F	Total no. journals
1960-1961	130	3160	34
1961-1962	164	3324	40
1962-1963	153	3477	43
1963-1964	219	3696	50
1964-1965	201	3897	58
1965-1966	262	4159	65

times as many articles, in contrast to the number carried by the first summary appearing approximately four decades earlier. This represents a 400 percent increase in the number of journals identified as carrying reading research, and a 700 percent increase in the number of articles reported by those journals over the four decades of the summaries.

The statistics are graphically illustrated in Figure 1. The information base in reading research has been gradually increasing in size over the past four decades with a sharp acceleration in this increase in recent years. This gradual increase in and by itself becomes an information problem. However, since the early sixties the water is beginning to overflow the banks and Licklider's flood stage, as mentioned earlier, appears to be upon us in the production of research articles on reading. Whether we call the increase exponential, or refer to it as a flood or an explosion, is beside the point. Methods have to be developed to cope with it. If the marked increase reported during recent years continues proportionately for the next decade greater expenditures of money and effort will have to be made just to keep our heads above water. Increased amounts of money will be available for reading research. The academic community will undoubtedly continue its interest in reading problems. It would be entirely realistic to expect the number of reports appearing within the next ten years to double. The statistics reported here relate to increases in published reports on reading. A parallel increase in non-published reports and other fugitive materials is also occurring which makes the total information problem even more acute.

Comparative Size of Messages

The 4,159 articles reported across the reading communication network

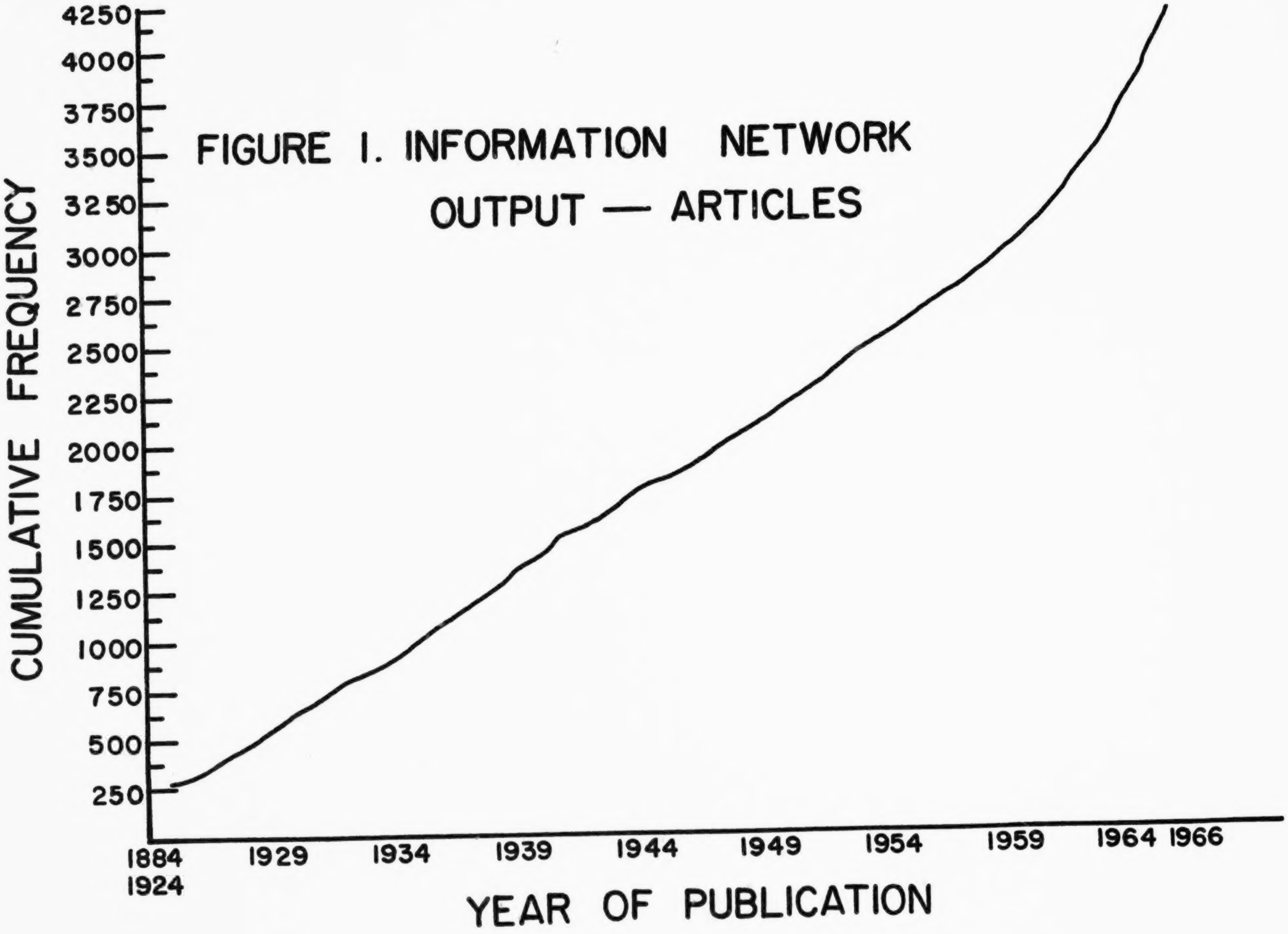


FIGURE I. INFORMATION NETWORK OUTPUT — ARTICLES

from 1884 to 1965-66 were not all of the same size. Table 2 breaks the articles down into four categories of length. The 5-10 page article accounts for the greatest number produced. The 1-4 page article was second in production with the 11-16 and 17 plus page articles falling third and fourth. The number of small and medium sized articles reported is roughly two and a half times greater than the number of lengthier articles. Published research literature in reading has appeared more often in articles 1-10 pages in length rather than in articles of 11 pages or better. Figure 2 provides a graphic illustration of the comparative size of articles reported.

Figure 3 illustrates the manner in which articles of all lengths have been added to the reading research information base. Variation in the relative rate of addition for articles of differing length is also indicated. The 5-10 page article has from the beginning of the summaries been produced in greater magnitude than the 1-4 page article. However, the gap between the two begins to widen markedly in the early forties, reaches a steady distance in the early fifties, and now appears to be maintaining itself at a consistent level. Almost from the beginning of the reporting period covered by the Gray summaries, the short and medium sized articles have been reported in greater magnitude than the lengthier articles. The gap begins to widen appreciably in the thirties and the trend continues to maintain itself at a consistent level throughout recent reporting periods. An interesting phenomenon appears with regard to the relative increase between 11-16 page articles and 17 plus page articles. Both were reported at about the same rate until the mid-forties when the shorter 11-16 page articles began to increase at a faster rate. This gap is widening and

Table 2

Article length - reading research literature.

Year	Length of articles in pages							
	1-4	C/F	5-10	C/F	11-16	C/F	17+	C/F
1884-1924	76	76	91	91	48	48	50	50
1924-1925	7	83	11	102	6	54	3	53
1925-1926	9	92	18	120	5	59	4	57
1926-1927	27	119	25	145	4	63	8	65
1927-1928	23	142	24	169	10	73	7	72
1928-1929	33	175	38	207	13	86	10	82
1929-1930	38	213	23	230	6	92	8	90
1930-1931	30	243	32	262	9	101	7	97
1931-1932	19	262	31	293	7	108	10	107
1932-1933	30	292	25	318	5	113	10	117
1933-1934	30	322	19	337	6	119	8	125
1934-1935	32	354	34	371	14	133	13	138
1935-1936	22	376	33	404	13	146	18	156
1936-1937	22	398	34	438	9	155	14	170
1937-1938	25	423	40	478	8	163	9	179
1938-1939	35	458	41	519	14	177	13	192
1939-1940	23	481	41	560	17	194	15	207
1940-1941	30	511	45	605	8	202	7	214
1941-1942	28	539	40	645	15	217	8	222
1942-1943	16	555	45	690	15	232	8	230
1943-1944	17	572	23	713	8	240	3	233
1944-1945	10	582	19	732	9	249	5	238
1945-1946	16	598	25	757	12	261	7	245
1946-1947	22	620	38	795	6	267	5	250
1947-1948	21	641	35	830	13	280	9	259
1948-1949	14	655	41	871	17	297	9	268
1949-1950	19	674	39	910	13	310	16	284
1950-1951	17	691	34	944	13	323	12	296
1951-1952	16	707	46	990	13	336	7	303
1952-1953	35	742	44	1034	12	348	6	309
1953-1954	23	765	25	1059	14	362	8	317
1954-1955	31	796	37	1096	13	375	2	319
1955-1956	36	832	37	1133	13	388	3	322
1956-1957	23	855	31	1164	14	402	2	324
1957-1958	31	886	43	1207	7	409	7	331
1958-1959	53	939	44	1251	9	418	5	336
1959-1960	32	971	44	1295	7	425	3	339

Table 2 cont'd.

Article length - reading research literature.

Year	Length of articles in pages							
	1-4	C/F	5-10	C/F	11-16	C/F	17+	C/F
1960-1961	68	1039	39	1334	18	443	5	344
1961-1962	56	1095	86	1420	12	455	10	354
1962-1963	49	1144	83	1503	14	469	7	361
1963-1964	81	1225	113	1616	14	483	11	372
1964-1965	90	1315	91	1707	14	497	6	378
1965-1966	120	1435	110	1817	13	510	19	397
Totals	1435		1817		510		397	

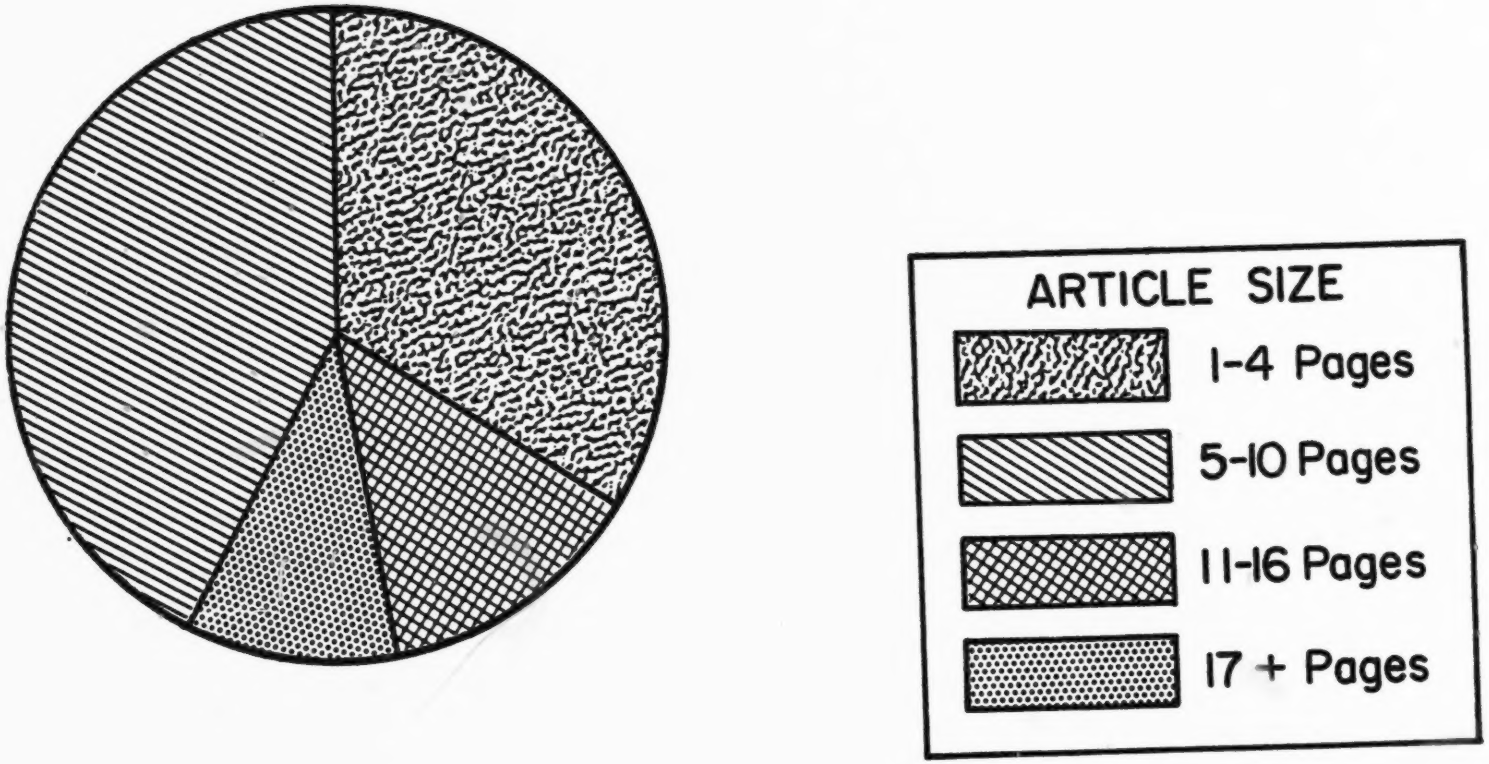
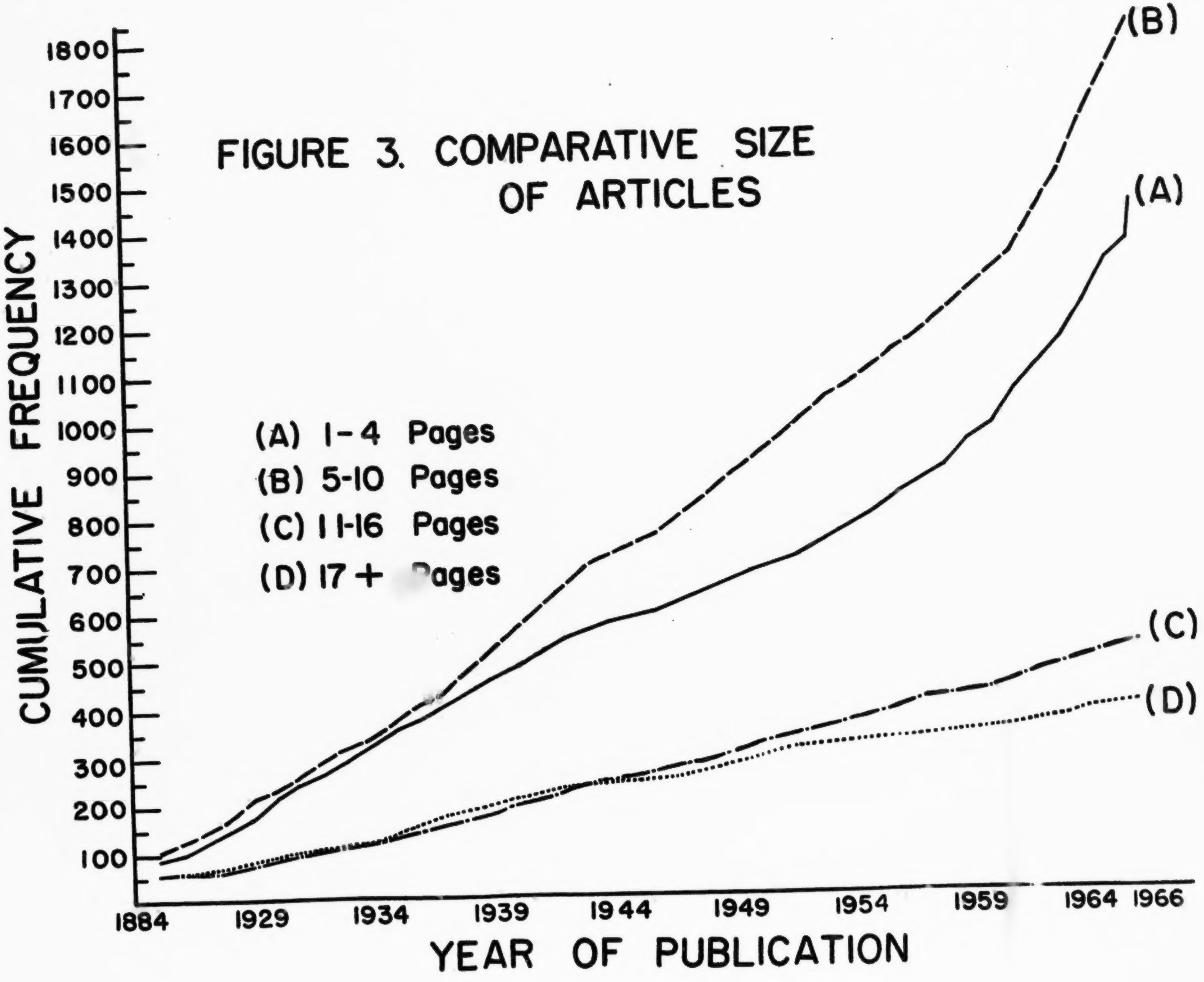


FIGURE 2. COMPARATIVE SIZE OF ARTICLES REPORTED

FIGURE 3. COMPARATIVE SIZE OF ARTICLES



should the trend continue there will eventually be a considerably larger number of 11-16 page articles reported than 17 plus page articles.

Figure 3 also provides further details on the marked overall increase in articles reported after the early sixties which was noted in the previous section on information network output. The major increase has been in production of short and medium length articles, particularly medium length articles. The sharp rise in production of 5-10 and 1-4 page articles accounts for a great deal of the "flood" of research reports on reading rather than a disproportionate increase in lengthy articles. The lengthier articles are increasing but this increase is proportional to previous years. With the short and medium length articles, the increase is out of proportion in comparison to the previous rate at which such articles have been added to the information base on reading research.

Core and Peripheral Journals

The two previous sections indicated the volume of articles published and compared the production of articles of varying length across the reading communication network for the period covered by the Gray summaries. This section examines the respective productive importance of the journals which produced the 4,159 articles and differentiates the core and peripheral journals for the field of reading. Beginning with the 1956-66 summary and working backwards, the total time span was broken down into five units: (1956-57 to 1965-66); (1946-47 to 1955-56); (1936-37 to 1945-46); and (1926-27 to 1935-36). The years 1884-1924, 1924-25, and 1925-26 were treated as the fifth unit. The number of articles produced by each journal for each of the five periods is tabulated in Tables 3 through 7. In each table the journals appear in rank order, in terms of number of articles reported, from highest to lowest producers of research on reading.

The data for the period from 1884 to 1925-26 are reported in Table 3. Although the time span covered is better than twenty-five years, and the production of educational literature was sketchy and in its infancy during this time, the production statistics are of interest and illustrate the pattern which continues for the next forty years. A total of 42 journals reported 326 articles related to reading research. The first 12 most productive journals carried approximately 80 percent of the articles published. The addition of the next six most productive journals increases the coverage to approximately 90 percent. Thus, the data establish the pattern of core, high frequency and peripheral journals in the reading communication network - a small number of journals carrying the major publication load, an additional number carrying several articles, and a large number of journals reporting an occasional article in reading.

For the period 1926-27 to 1935-36 (Table 4) a total of 107 journals reported 755 articles related to reading research. The 26 core journals carried approximately 80 percent of the articles published. Adding the next 17 most productive high frequency journals increases the coverage to approximately 90 percent. Thus, a total of 43 journals out of the 107 reported better than nine-tenths of the articles published. The remaining one-tenth appeared in 64 peripheral journals.

The pattern for the period 1936-37 to 1945-46 (Table 5) is almost identical to the first ten year unit. A total of 102 journals reported 780 articles related to reading research. There was a slight decrease of 5 in journals carrying articles and an increase of 25 reported articles.

Table 3

Rank order published research literature in reading - 1884-1924 -- 1925-1926.

Journal	Total no. articles	1884-1924	1924-1925	1925-1926
Elementary School J.	59	47	5	7
J. of Educational Psychology	45	41	3	1
School & Society	38	32	3	3
J. of Educational Research	35	26	5	4
Teachers College Record	23	11	8	4
School Review	14	11	1	2
Pedagogical Seminary	13	12		1
Elementary School Teacher	11	11		
Chicago Schools J.	8	6		2
American J. of Psychology	7	7		
Ed'l. Administration & Supervision	7	6		1
Psychological Clinic	7	7		
J. of Educational Method	5	2		3
American School Board J.	4	3	1	
Detroit J. of Education	4	4		
Education	4	4		
Psychological Monographs	4	4		
Educational Review	3	3		
English Journal	3	3		
J. of Experimental Pedagogy	3	3		
J. of Experimental Psychology	3	2		1
Midland Schools	2	2		
Psychological Bulletin	2	2		
School World	2	2		
Teachers J. & Abstract	2			2
Univ. of Pittsburgh School of Ed. J.	2			2
American Education	1	1		
Atlantic Educational Journal	1	1		
British J. of Psychology	1	1		
College Chronical	1			1
Educational Research	1	1		
Forum of Education	1	1		
J. of Applied Psychology	1			1
J. of Louisiana Teachers Assn.	1	1		
J. of New York State Teachers Assn.	1	1		
Nature Study Review	1	1		
Peabody J. of Education	1	1		
Popular Science Monthly	1	1		
Public School Messenger	1			1
Quarterly J. of Speech Education	1	1		
Training School Bulletin	1	1		
Volta Review	1	1		
Totals	326	264	26	36

Table 4

Rank order published research literature in reading - 1926-1927 -- 1935-1936.

Journal	Total no. articles	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935	1935-1936
Elementary School Journal	92	6	10	16	5	15	10	8	6	8	8
J. of Educational Research	68	5	7	6	5	4	7	5	6	10	13
J. of Educational Psychology	53	6	4	8	6	2	3	4	8	6	6
J. of Applied Psychology	43		3	5	7	6	2	8	1	5	6
School & Society	40	6	4	5	6	1	3	5	5	5	
Elementary English Review	35	5	5	3	1	4	1	1	4	6	5
School Review	34	3	1	4	4	4	7	3	4	3	1
Educational Research Bulletin	28	8	2	4	5	2	1	2		4	
Teacher's College Record	21	5	5	3	1	1	1	2		2	1
English Journal	18	3		1	1		2	3	1	5	2
Educational Method	16			2	4	3	2	2	2	1	
Library Quarterly	16					3	2	2	2	4	3
J. of Genetic Psychology	14				3		3		1	3	4
Peabody J. of Education	14	2	1	3		3	1	1		1	2
Psychological Clinic	13		3	4		4	2				
J. of Experimental Education	12							3	4	2	3
J. of Experimental Psychology	12	4		2	1	2	1	1			1
Education	11		2			1	1		1		6
Ed'l. Administration & Supervision	11		1	2	1		1	2	2	1	1
J. of Higher Education	10				1	3	1	1		3	1
Univ. of Pittsburgh School of Ed. J.	10	2		4	3	1					
Childhood Education	9	3				1		3	2		
Calif. Quarterly of Secondary Ed.	8		3	1	1	1			2		
Psychological Bulletin	8		1	1	2	1			1	1	1
Calif. J. of Elementary Education	6									3	3
Chicago Schools J.	6		1	2	2	1					
Genetic Psychology Monographs	6			3	1		2				

Table 4 cont'd.

Rank order published research literature in reading - 1926-1927 -- 1935-1936. cont'd.

Journal	Total no. articles	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935	1935-1936
J. of General Psychology	6			1			1	2			2
American J. of Psychology	5			1		3			1		
Library Journal	5	1	1				1	1	1		
Publisher's Weekly	5		1	1	1					2	
Rev. of Educational Research	4								1	3	
Teacher's College J.	4				1	1		1		1	
Calif. J. of Secondary Education	3						1			2	
J. of Adult Education	3			1						1	1
J. of Education	3					1				2	
J. of Educational Method	3	1	2								
J. of Juvenile Research	3									1	2
J. of Nat'l. Education Assn.	3				2		1				
J. of Negro Education	3							1	2		
Modern Language Forum	3	1			2						
Psychological Review	3			1		1			1		
American J. of Ophthalmology	2									1	1
British J. of Psychology	2								1	1	
Catholic Educational Review	2		1							1	
Educational Trends	2							1	1		
High School Journal	2					1					1
J. of American Medical Assn.	2			1	1						
J. of Education & Psychology	2						2				
J. of Educational Sociology	2			1			1				
Junior College Journal	2							1	1		
Mental Hygiene	2			1			1				
Modern Language Journal	2					1					1
Nation's Schools	2								1		1
Pittsburgh Schools	2						1			1	
Progressive Education	2		1								1
Psychological Monographs	2				2						

Table 4 cont'd.

Rank order published research literature in reading - 1926-1927 -- 1935-1936. cont'd.

Journal	Total no. articles	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935	1935-1936
School Executive's Magazine	2					1	1				
Teacher's J. & Abstract	2		1			1					
Training School Bulletin	2					1					1
AATC Quarterly	1						1				
American Academy of Optometry	1									1	
American J. of Orthopsychiatry	1									1	
American Schoolmaster	1					1					
American School Board Journal	1										1
Annals of Amer. Academy of Political & Social Sciences	1			1							
Arizona Teacher	1							1			
Australian Educational Studies	1							1			
Bookman	1		1								
British J. of Educational Psychology	1									1	
Debunker	1			1							
Educational Outlook	1						1				
Educational Review	1	1									
Educational Screen	1										1
Elementary English	1							1			
English Leaflet	1								1		
Forum of Education	1			1							
German Quarterly	1							1			
High School Teacher	1					1					
Historical Outlook	1							1			
Illinois Medical Journal	1										1
Illinois Teacher	1										1
Iowa Library Quarterly	1		1								
Journalism Quarterly	1										1
J. of Exceptional Children	1										1
J. of Industrial Hygiene	1										1

Table 4 cont'd.

Rank order published research literature in reading - 1926-1927 -- 1935-1936. cont'd.

Journal	Total no. articles	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935	1935-1936
J. of Psychology	1										1
Libraries	1	1									
London Times Ed'l. Supplement	1				1						
Minnesota J. of Education	1				1						
New England J. of Medicine	1			1							
New Republic	1		1								
New York State Education	1					1					
North Carolina Teacher	1				1						
Pedagogical Seminary	1						1				
Phi Delta Kappan	1							1			
Platoon School	1				1						
Public School Messenger	1	1									
School Science & Math.	1							1			
Science	1									1	
Science Education	1					1					
Smith College Studies in Social Work	1						1				
Special Libraries	1			1							
Survey	1		1								
Texas Outlook	1				1						
Virginia J. of Education	1				1						
Virginia Teacher	1			1							
Totals	755	64	64	94	75	79	67	70	63	93	86

Table 5

Rank order published research literature in reading - 1936-1937 -- 1945-1946.

Journal	Total no. articles	1936-1937	1937-1938	1938-1939	1939-1940	1940-1941	1941-1942	1942-1943	1943-1944	1944-1945	1945-1946
J. of Educational Psychology	93	9	10	6	10	6	14	13	9	8	8
J. of Educational Research	93	5	9	14	9	7	3	16	12	9	9
Elementary School Journal	90	12	9	11	9	9	12	9	7	3	9
Elementary English Review	47	9	6	14	5	7	3				3
School Review	38	6	5	4	7	1	6	6	1	1	1
J. of Experimental Education	34	5	2	2	5	6	8	4	1	1	
School & Society	24		4	3	3	7	2	1	1	1	2
English Journal	22	3	5	6	3	2	1	2			
J. of Applied Psychology	18	1	2		1	3	1	3	1	3	3
Peabody J. of Education	16			2	4	3		4	1	1	1
Library Quarterly	15		3	1	2	1	3	1	3		1
J. of Genetic Psychology	14	1		4	1	3	2	1	1	1	
J. of Experimental Psychology	12	1	2	2	2	2	1		1		1
J. of Psychology	12	1			5	3		1	1		1
Teacher's College Record	11	3		2		1	2		2	1	
J. of General Psychology	10		2	2			2			1	3
Pittsburgh Schools	10	2		1	4		1	1	1		
Psychological Monographs	10	7		1					2		
Amer. Academy of Optometry	8		1		2		4			1	
Ed'l. Administration & Supervision	8	1		1		2	1	3			
Rev. of Educational Research	8	1	2		1			3			1
American J. of Psychology	7			1	1	1	1		2	1	
Educational Research Bulletin	7	1		2	1	2	1				
J. of Higher Education	7		1	3		2	1				
Chicago Schools Journal	6	2	1	1	1		1				
Education	6	1				1	4				
Texas Outlook	6			1	2		1	1	1		
American J. of Orthopsychiatry	5	1			2			2			
Educational Method	5		3	1		1					
El Paso School Standard	5						4	1			

Table 5 cont'd.

Rank order published research literature in reading - 1936-1937 -- 1945-1946. cont'd.

Journal	Total no. articles	1936-1937	1937-1938	1938-1939	1939-1940	1940-1941	1941-1942	1942-1943	1943-1944	1944-1945	1945-1946
J. of Negro Education	5		1			1			1	1	1
J. of Social Psychology	5					3				2	
Teacher's College J.	5			1		1	2	1			
American J. of Ophthalmology	4			1	1			1		1	
Calif. J. of Elementary Education	4	1	1		1	1					
High Points	4		1	1	1						1
Modern Language Journal	4		1	1	2						
National Elementary Principal	4			1	1				1		1
Archives of Ophthalmology	3				1	1		1			
British J. of Educational Psychology	3					1	2				
Junior College Journal	3		2			1					
Mathematics Teacher	3	1		2							
St. Louis Public Schools Journal	3										3
Visual Digest	3							1		2	
Annual Review of Psychology	2							1			1
Calif. J. of Secondary Education	2		1				1				
Catholic Educational Review	2			1			1				
Catholic Schools Journal	2			2							
Child Development	2				2						
The Clearinghouse	2				1					1	
Ed'l. & Psychological Measurement	2						1				1
Educational Record	2		1	1							
Elementary English	2							2			
Genetic Psychology Monographs	2						1			1	
J. of Abnormal & Social Psychology	2										2
J. of Amer. Assn. of Collegiate Registrars	2						1				1
J. of Consulting Psychology	2		1	1							
J. of Exceptional Children	2	1						1			
Kansas Studies in Education	2					2					
Phi Delta Kappan	2						1	1			

Table 5 cont'd.

Rank order published research literature in reading - 1936-1937 -- 1945-1946. cont'd.

Journal	Total no. articles	1936-1937	1937-1938	1938-1939	1939-1940	1940-1941	1941-1942	1942-1943	1943-1944	1944-1945	1945-1946
Psychological Bulletin	2						1				1
Psychological Record	2					2					
School Science & Math.	2					1					1
Science Education	2		1				1				
Sight-Saving Review	2				1			1			
What Does Research Say?	2	1	1								
Archives of Pediatrics	1		1								
British J. of Psychology	1	1									
College English	1				1						
Educational Forum	1			1							
Educational Leadership	1										1
Educational Research	1				1						
Educational Research Bulletin	1									1	
Educational Screen	1			1							
Harvard Educational Review	1		1								
High School Journal	1							1			
Journalism Quarterly	1								1		
J. of Education & Psychology	1					1					
J. of Franklin Institute	1				1						
J. of the Optical Society	1				1						
J. of Speech & Hearing Disorders	1			1							
Library Trends	1	1									
Mental Hygiene	1	1									
Midland Schools	1								1		
Montana Education	1		1								
Nation's Schools	1			1							
Ohio Schools	1					1					
Optometric Weekly	1										1
Orthoptist	1			1							
Psychometrika	1									1	

Table 5 cont'd.

Rank order published research literature in reading - 1936-1937 -- 1945-1946. cont'd.

Journal	Total no. articles	1936-1937	1937-1938	1938-1939	1939-1940	1940-1941	1941-1942	1942-1943	1943-1944	1944-1945	1945-1946
Public School Messenger	1				1						
Quarterly J. of Speech	1			1							
Research Quarterly	1										1
Secondary Education	1		1								
School Curriulum & Economic Improvement	1					1					
School Executive	1					1					
Social Education	1							1			
Social Forces	1				1						
Special Education Review	1										1
Studies & Summaries	1					1					
Training School Bulletin	1									1	
Wisconsin J. of Education	1					1					
Totals	780	79	82	103	97	90	91	84	51	43	60

The 26 core journals carried approximately 80 percent of the articles published. Adding the next 18 most productive high frequency journals increases the coverage to approximately 90 percent. Thus, a total of 44 journals out of the 102 reported better than nine-tenths of the articles published. The other one-tenth of the output was carried by 58 peripheral journals.

Except for slight increase in the number of journals, and in the total number of articles published, the pattern for 1946-47 to 1955-56 (Table 6) is much the same as the first two ten year units. A total of 118 journals reported 814 articles related to reading research. There was an increase of 16 journals carrying articles and of 24 reported articles. The 28 core journals carried approximately 80 percent of the articles published. Adding the 22 next most productive high frequency journals increases the coverage to approximately 90 percent. Thus, a total of 50 journals out of the 118 reported better than nine-tenths of the articles published. The other one-tenth of the output was carried in the remaining 68 peripheral journals.

The most recent ten year period 1956-57 to 1965-66 (Table 7) presents an interesting development. The previous increase in number of journals and articles reported continues. A total of 137 journals reported 1,484 articles related to reading research. The number of journals increased 19 over the last ten year unit and the number of articles reported increased by a phenomenal 670. This represents an increase of approximately 14 percent in number of journals and approximately 45 percent in the number of articles reported. As indicated earlier in the section on network output, the increase in reported articles and journals builds up gradually

Table 6

Rank order published research literature in reading - 1946-1947 -- 1955-1956.

Journal	Total no. articles	1946-1947	1947-1948	1948-1949	1949-1950	1950-1951	1951-1952	1952-1953	1953-1954	1954-1955	1955-1956
J. of Educational Research	111	8	12	16	12	7	8	12	10	9	17
J. of Educational Psychology	80	12	9	8	5	6	6	14	4	8	8
Elementary School J.	60	9	5	3	8	2	5	8	6	9	5
Journalism Quarterly	52	4		8	6	3	5	3	7	8	8
Elementary English	51	2	3	7	8	3	6	5	3	5	9
J. of Applied Psychology	48	6	1	6	3	7	13	8		1	3
British J. of Educational Psychology	31	2	1	1	5	6	1	5	3	4	3
School & Society	26	1	2		2	6	5	4	1	1	4
School Review	17	3	2	1	1	3	4	1	1		1
Ed'l. Administration & Supervision	13			1	2		3	4		2	1
Ed'l. & Psychological Measurement	13				1		2	2	8		
Educational Research Bulletin	13	3	3	3		1	2				1
J. of Genetic Psychology	12		3	1	1	4				1	2
Studies in Reading	12				8	4					
Calif. J. of Educational Research	11					4		4	1		2
J. of Experimental Education	11	1	1	2	1	1	1	1	1	2	
J. of Social Psychology	11		1			4	2	1	1		2
J. of Experimental Psychology	10	4			1			3		2	
J. of Consulting Psychology	9		1	1	1	1		2		2	1
American J. of Psychology	8		2	1				4		1	
Education	8	1			1		3		2	1	
J. of Psychology	8		1		3		1	1		1	1
College English	7				1					5	1
J. of General Psychology	7			2	1		1		2	1	
Peabody J. of Education	7			1	2		1			2	1
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	6						1		2		3
Language Arts & Fine Arts Rev. of Educational Research	6			3			1			2	

Table 6 cont'd.

Rank order published research literature in reading - 1946-1947 -- 1955-1956. cont'd.

Journal	Total no. articles	1946-1947	1947-1948	1948-1949	1949-1950	1950-1951	1951-1952	1952-1953	1953-1954	1954-1955	1955-1956
American J. of Ophthalmology	5		2						1	2	
American J. of Orthopsychiatry	5		1		1				2		1
Catholic Educational Review	5		2					1	2		
J. of Pediatrics	5		1	2						1	1
High Points	4	2	1								1
Improving Educational Research	4		4								
J. of Educational Sociology	4			1	3						
J. of Speech & Hearing Disorders	4		1	1				1		1	
Library Quarterly	4		2	2							
Alberta J. of Educational Research	3										3
British J. of Psychology	3					1		1		1	
Calif. J. of Elementary Education	3			1	2						
Columbia Optometrist	3				1			2			
English Journal	3					1		1			1
Genetic Psychology Monographs	3			2					1		
Illuminating Engineering	3		2	1							
J. of Amer. Optometric Assn.	3					2					1
J. of Higher Education	3	1				1			1		
Nat'l. Assn. of Secondary School Principal's Bulletin	3		1				2				
Psychological Monographs: General & Applied	3	1	1		1						
The Reading Teacher	3							2	1		
Rev. of Educational Research	3						1				2
Training School Bulletin	3				1	1			1		
American J. of Mental Deficiency	2	1							1		
Archives of Pediatrics	2									1	1
British J. of Statistical Psychology	2										2
Child Development	2					1	1				
The Clearing House	2	1			1						

Table 6 cont'd.

Rank order published research literature in reading - 1946-1947 -- 1955-1956. cont'd.

Journal	Total no. articles	1946-1947	1947-1948	1948-1949	1949-1950	1950-1951	1951-1952	1952-1953	1953-1954	1954-1955	1955-1956
J. of Communication	2									2	
J. of Negro Education	2						1				1
J. of Personality & Social Psych.	2				1					1	
J. of Projective Techniques	2								1	1	
The Nervous Child	2	1							1		
Optometric Weekly	2		1					1			
Phi Delta Kappan	2						1	1			
Psychometrika	2	2									
Science	2				1					1	
Sociology & Social Research	2				1	1					
Speech Monographs	2								1	1	
American J. of Psychotherapy	1		1								
American J. of Public Health	1	1									
British J. of Educational Studies	1										1
Calif. J. of Secondary Education	1			1							
Calif. Teacher's Assn. J.	1								1		
Chemical Education	1							1			
Chicago Schools Journal	1				1						
Dr. Alagappa Training College J. of Ed.	1								1		
Editor & Publisher	1						1				
Educational Review	1								1		
German Quarterly	1								1		
Handbook of Applied Psychology	1					1					
J. of Abnormal & Social Psychology	1			1							
J. of Clinical Psychology	1									1	
J. of Mental Science	1			1							
J. of Nervous & Mental Disease	1									1	
J. of Optical Society of America	1			1							
J. of Personality	1									1	
J. of School Psychology	1		1								

Table 6 cont'd.

Rank order published research literature in reading - 1946-1947 -- 1955-1956. cont'd.

Journal	Total no. articles	1946-1947	1947-1948	1948-1949	1949-1950	1950-1951	1951-1952	1952-1953	1953-1954	1954-1955	1955-1956
Junior College Journal	1					1					
MART News	1										1
Mathematics Teacher	1		1								
Michigan Education Journal	1							1			
Mississippi Educational Advance	1		1								
Nat'l. Business Education Quarterly	1			1							
Nat'l. Education Assn. Journal	1						1				
The Nation's Schools	1								1		
Occupations	1		1								
Optometric Association	1		1								
Optometric World	1		1								
Personnel	1						1				
Personnel Psychology	1					1					
The Phoenix	1	1									
Pittsburgh Schools	1							1			
Progressive Education	1						1				
Psychological Bulletin	1		1								
Public Opinion Quarterly	1									1	
Quarterly of Child Behavior	1						1				
Quarterly J. of Experimental Psych.	1					1					
Quart. Rev. of Higher Ed. Among Negroes	1	1									
School Science & Math.	1					1					
Science Ed.	1							1			
Scientific Monthly	1	1									
Sight-Saving Review	1							1			
Sociometry	1			1							
Tasmanian Education	1					1					
Teacher's College Journal	1		1								

Table 6 cont'd.

Rank order published research literature in reading - 1946-1947 -- 1955-1956. cont'd.

Journal	Total no. articles	1946-1947	1947-1948	1948-1949	1949-1950	1950-1951	1951-1952	1952-1953	1953-1954	1954-1955	1955-1956
Texas Outlook	1		1								
Understanding the Child	1	1									
Virginia J. of Education	1		1								
Visual Digest	1		1								
Volta Review	1	1									
Totals	814	71	78	81	87	76	82	97	70	83	89

Table 7

Rank order published research literature in reading - 1956-1957 -- 1965-1966.

Journal	Total no. articles	1956-1957	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966
The Reading Teacher	156		1	3	10	13	15	21	28	20	45
J. of Educational Research	155	12	18	18	13	16	13	23	9	17	16
Elementary English	123	7	8	16	7	11	13	16	13	14	18
Journalism Quarterly	109	2	11	9	7	14	15	7	26	4	14
J. of Developmental Reading	91		3	9	12	18	14	11	20	4	
Elementary School Journal	70	6	7	5	1	6	5	9	10	13	8
J. of Educational Psychology	51	6	3	5		6	10	4	5	10	2
British J. of Ed'l. Psychology	43	5	2	5	8	3	6	3	3	6	2
J. of Reading	34									20	14
J. of Experimental Education	31	2	3	2		3	2	6	8	4	1
Alberta J. of Educational Research	26	2	1	2	5	3	2	1	3	3	4
Perceptual & Motor Skills	25						3	3	5	9	5
J. of Abnormal & Social Psychology	24					4	11	1	6	2	
Calif. J. of Educational Research	22	1		2	5	1	3	2	3	5	
Education	20		1	1	2	4	3	4	3	1	1
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	17	2	4	3	1		1	1	1	2	2
English Journal	16		5	1		1	2	2		1	4
J. of Applied Psychology	15		3	1	1		3		3	2	2
Psychological Reports	15						2	2	2	3	6
J. of The Reading Specialist	14									5	9
J. of Genetic Psychology	13	1		6				1	1	2	2
Ontario J. of Educational Research	13				3	3		3		3	1
Public Opinion Quarterly	13						3		9		1
Exceptional Children	10						3	2	1		4
Illinois School Research	10										10
J. of Communication	10						3	1	2	1	3
J. of General Psychology	10	1		2	1		1		4	1	
J. of Psychology	10	1	1	1		4		1		2	
J. of Speech & Hearing Disorders	10	3		2		1	2		1		1

Table 7 cont'd.

Rank order published research literature in reading - 1956-1957 -- 1965-1966. cont'd.

Journal	Total no. articles	1956-1957	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966
Reading Research Quarterly	10										10
American Education Research J.	9								2	3	4
American J. of Mental Deficiency	9							2		2	5
Child Development	9		1			1			4	1	2
J. of Advertising Research	9								7	1	1
J. of Education	9		3	1	2	1			2		
J. of Verbal Learning & Verbal Behavior	9								6	1	2
Psychology in the Schools	9									5	4
Ed'l. & Psychological Measurement	8			1		1	2	1	1	1	1
Educational Research	8				1			1	2	2	2
Library Quarterly	8		1		2	1	1		1		2
Rev. of Educational Research	8								1	2	5
J. of Experimental Psychology	7									3	4
American J. of Orthopsychiatry	6							3	1	1	1
Audio-Visual Communication Review	6		1			1			1		3
Columbia Journalism Review	6								6		
J. of Consulting Psychology	6						2	2		1	1
J. of Personality & Social Psychology	6									1	5
Training School Bulletin	6						3	1			2
American J. of Psychology	5							2	2		1
Personnel & Guidance Journal	5				1	2		2			
Phi Delta Kappan	5	3			1					1	
School Science & Math.	5	1			1	1		1			1
Science Education	5	1		1		1		1			1
British J. of Psychology	4									1	3
Chicago Schools J.	4	1		1			1				1
Editor & Publisher	4						4				
Educational Leadership	4		1	1				1		1	
Educational Research Bulletin	4	1				1	2				

Table 7 cont'd.

Rank order published research literature in reading - 1956-1957 -- 1965-1966. cont'd.

Journal	Total no. articles	1956-1957	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966
Genetic Psychology Monographs	4			1				1	1		1
J. of Educational Measurement	4										4
J. of Social Psychology	4	1	1						1		1
Nat'l. Assn. of Secondary School Principal's Bulletin	4				1	1		2			
Peabody J. of Education	4	1				1				2	
Speech Monographs	4										4
American Imago	3						3				
American J. of Ophthalmology	3	1		1					1		
Arithmetic Teacher	3									2	1
Ed'l. Administration & Supervision	3			1	1		1				
Language Arts & Fine Arts Rev. of Ed'l. Research	3		1			2					
Mathematics Teacher	3	1				1					1
Reading Horizons	3								1		2
School & Society	3		1	1				1			
Annual Review of Psychology	2								2		
Australian J. of Education	2			2							
Canadian J. of Psychology	2									1	1
Clearing House	2	1	1								
College English	2	1									1
Gifted Child Quarterly	2								2		
High School Journal	2						1	1			
J. of American Optometric Assn.	2	1		1							
J. of Clinical Psychology	2			1							1
J. of Education & Psychology	2								2		
J. of Negro Education	2						1	1			
J. of School Psychology	2							1	1		
Junior College J.	2						2				
Kansas Studies in Education	2								1		1

Table 7 cont'd.

Rank order published research literature in reading - 1956-1957 -- 1965-1966. cont'd.

Journal	Total no. articles	1956-1957	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966
Michigan Education Journal	2							2			
National Elementary Principal	2									1	1
Psychological Bulletin	2			1						1	
School Review	2		1							1	
Science Teacher	2						2				
Sociometry	2						1				1
Teacher Education	2									2	
Vocational Guidance Quarterly	2						1			1	
Acta Otolaryng	1			1							
Acta Sociologica	1					1					
Adult Leadership	1		1								
American Biology Teacher	1							1			
American Psychologist	1		1								
American Sociological Review	1		1								
Annals of Otology, Rhinology & Laryngology	1					1					
Archives of Ophthalmology	1							1			
British J. of Statistical Psychology	1	1									
Canadian Ed. & Research Digest	1									1	
Catholic Educational Review	1						1				
Childhood Education	1									1	
College Composition & Communication	1			1							
College of Education Record	1								1		
Education Digest	1										1
Educational Horizons	1										1
High Points	1	1									
Illinois English Bulletin	1									1	
J. of Abnormal Psychology	1								1		
J. of Counseling Psychology	1										1
J. of Experimental Analysis of Behavior	1								1		

Table 7 cont'd.

Rank order published research literature in reading - 1956-1957 -- 1965-1966. cont'd.

Journal	Total no. articles	1956-1957	1957-1958	1958-1959	1959-1960	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966
J. of Experimental Social Psychology	1									1	
J. of Research in Science Teaching	1										1
J. of Social Research	1		1								
J. of Speech & Hearing Research	1								1		
J. of Teacher Education	1					1					
Mental Hygiene	1							1			
Merrill-Palmer Quart. of Behavior & Development	1									1	
Modern Language Journal	1	1									
Montana Education	1										1
Nat'l. Assn. of Women Deans & Counselors Journal	1			1							
Negro Educational Review	1	1									
Pittsburgh Schools	1		1								
Psychological Monographs: General & Applied	1						1				
Quart. J. of Experimental Psychology	1									1	
Reading Improvement	1									1	
Saskatchewan Bulletin	1	1									
School & Community	1			1							
School Management	1									1	
School Service Report	1										1
Slow Learning Child	1									1	
Social Forces	1								1		
Univ. of Kansas Bulletin of Ed.	1					1					
Totals	1484	70	88	111	86	130	164	153	219	201	262

over the first periods of the Gray summaries but increases markedly in the most recent decade. The 33 core journals carried approximately 80 percent of the articles published. Adding the next 19 most productive high frequency journals increases the coverage to approximately 90 percent. Thus, 52 journals out of the 137 reported better than nine-tenths of the articles published. The remaining one-tenth of the output was carried in 85 peripheral journals. In the previous periods approximately half the total number of journals (core and high frequency) reported better than 90 percent of the articles and the remaining half (peripheral) reported the other 10 percent. However, in this period 90 percent of the literature is reported by thirty-eight percent of the journals (core and high frequency) and the remaining 10 percent by sixty-two percent (peripheral) of the journals. Apparently, the number of core and high frequency journals continues to increase but an increasingly larger percentage of peripheral journals are reporting the occasional article or two on reading.

Table 8 presents a composite of the core literature production, by periods, for the total time span covered by the Gray summaries. The vertical column for each period indicates the core journals (those producing 80 percent of the articles reported) for that period and the number of articles published. Many of the journals produced articles in periods other than those marked but the volume was not of sufficient magnitude to classify them as core publications. The composite listing is useful in defining a set of reading research core or most productive journals for current use.

The 65 core publications have been arrayed in seven categories.

Table 8

Composite - core journal production 1884 - 1965-66

Journal	1884 to 1925-26	1926-27 to 1935-36	1936-37 to 1945-46	1946-47 to 1955-56	1956-57 to 1965-66
Category I					
1. Elementary School J.	59	92	90	60	70
2. J. of Educational Psychology	45	53	93	80	51
3. J. of Educational Research	35	68	93	111	155
4. Education		11	6	8	20
5. J. of Applied Psychology		43	18	48	15
6. J. of Genetic Psychology		14	14	12	13
7. J. of Experimental Education		12	34	11	31
Category II					
8. English Journal		18	22		16
9. J. of General Psychology			10	7	10
10. J. of Psychology			12	8	10
Category III					
11. Amer. J. of Optometry & Archives of Amer. Academy of Optometry				6	17
12. British J. of Educational Psychology				31	43
13. Calif. J. of Educational Research				11	22
14. Elementary English				51	123
15. Journalism Quarterly				52	109

Table 8 cont'd.

Composite - core journal production 1884 - 1965-66

Journal	1884 to 1925-26	1926-27 to 1935-36	1936-37 to 1945-46	1946-47 to 1955-56	1956-57 to 1965-66
Category IV					
16. Alberta J. of Educational Research					26
17. American Education Research J.					9
18. American J. of Mental Deficiency					9
19. Child Development					9
20. Exceptional Children					10
21. Illinois School Research					10
22. J. of Abnormal & Social Psychology					24
23. J. of Communication					10
24. J. of Developmental Reading					91
25. J. of Reading					34
26. J. of The Reading Specialist					14
27. J. of Speech & Hearing Disorders					10
28. Perceptual & Motor Skills					25
29. Ontario J. of Educational Research					13
30. Psychological Reports					15
31. The Reading Teacher					156
32. Reading Research Quarterly					10
33. Public Opinion Quarterly					13
Category V					
34. School Review	14	34	38	17	
35. School & Society	38	40	24	26	

Table 8 cont'd.

Composite - core journal production 1884 - 1965-66

Journal	1884 to 1925-26	1926-27 to 1935-36	1936-37 to 1945-46	1946-47 to 1955-56	1956-57 to 1965-66
Category V cont'd.					
36. Ed'l. Administration & Supervision	7	11	8	13	
37. Ed'l. Research Bulletin		28	7	13	
38. J. of Experimental Psychology		12	12	10	
39. Peabody J. of Education		14	16	7	
Category VI					
40. Studies in Reading				12	
41. Ed'l. & Psychological Measurement				13	
42. J. of Consulting Psychology				9	
43. College English				7	
44. American J. of Psychology	7		7	8	
45. American J. of Ophthalmology				5	
46. J. of Social Psychology				11	
47. Language Arts & Fine Arts Rev. of Educational Research				6	
Category VII					
48. Library Quarterly		16	15		
49. Pittsburgh Schools			10		
50. Amer. Academy of Optometry			8		

Table 8 cont'd.

Composite - core journal production 1884 - 1965-66

Journal	1884 to 1925-26	1926-27 to 1935-36	1936-37 to 1945-46	1946-47 to 1955-56	1956-57 to 1965-66
Category VII cont'd.					
51. Elementary English Review		35	47		
52. Chicago Schools Journal	8	6	6		
53. Psychological Monographs			10		
54. Rev. of Educational Research			8		
55. Teachers College Record	23	21	11		
56. J. of Higher Education		10	7		
57. Psychological Bulletin		8			
58. Univ. of Pittsburgh School of Education Journal		10			
59. Psychological Clinic	7	13			
60. Calif. J. of Elementary Education		6			
61. Calif. Quarterly of Secondary Ed.		8			
62. Childhood Education		9			
63. Educational Method		16			
64. Pedagogical Seminary	13				
65. Elementary School Teacher	11				

Category I includes those journals which have been listed as core publications for four or five of the periods. These publications would be essential in any listing of current core journals for reading. Journals in Category II, those listed as core for three decades, should also be included. The English Journal is included in this category even though its publication during one of the periods was not high enough to warrant its being listed as core. Category III lists journals which have been core publications for the most recent two decades. Category IV lists journals which have been identified as the core productions for the most recent decade. Both categories should be included as current core publications for reading research.

Category V is an interesting category and illustrates the shift that takes place among journals in terms of relative productivity of articles. This category includes six journals which were core producers for three and four decades but whose volume was not of sufficient magnitude in the most recent decade to warrant classification as core. All six journals, however, were still producing reading articles in the most recent period and may have just had a low publication rate for the current decade or may be declining in overall productive importance. In any event, it would be wise to include them in a current listing of core journals so their production can be monitored to determine if they warrant future core status.

Category VI journals are those which had core production the fourth period but fell out of the core status in the most recent decade. Some of these journals produced articles the most recent decade and may also warrant monitoring to determine if their decline is temporary or will continue. Category VII includes those journals which were at one time of core status but have not achieved that level of productivity for the most recent two, three and four decades. These publications may still produce an occasional article on reading but the volume of publication is relatively low as compared to their previous output. They can definitely be classed as peripheral publications for the current period.

It would appear that the 47 journals in Categories I through IV would comprise a highly useful list of current core or most productive journals for reading research. Monitoring the publication of these journals would assure that 75-80 percent of the published research literature related to reading would be identified. Judicious selection of additional publications in Category VII, and from other high frequency and peripheral journals identified previously, would increase the probability substantially that the majority of relevant sources were being included. This core listing is compiled on the basis of volume of production for any one journal. Caution must be exercised in using it as the sole means of selecting important journals for reading research. The significance of the rank of the volume of publication for any one journal is relative to the volume of publication for all other journals tabulated during that period. Thus, lines of demarcation for the three categories - core, high frequency and peripheral - are seldom completely absolute and many journals shifted in and out of these categories, based on their relative production, for the time period being tabulated.

In addition, the relative importance of some single articles from low frequency publications must be considered when identifying the important core journals. For example, the AERA Language Arts and Fine Arts Review, item 47 - Category III, had sufficient relative publication volume to classify it as core for one period, but not for the most recent decade. The review is done on a three year cycle and is one of the most significant and useful reviews for reading research. However, if core journals were selected on the basis of publication volume alone the review would be omitted. Any listing of core publications should consider other criteria in addition to sheer volume of publication, and the low producing high frequency and peripheral literature sould also be combed for the extremely significant occasional articles and reviews they can contribute.

It is interesting to note the nature and distribution of the 33 core publications identified for the most recent decade. They illustrate the diversity of interests involved and the interdisciplinary thrust of recent research efforts in reading. Journals from domains of education such as child development, administration, curriculum and educational psychology are represented. Reports from areas such as psychology, vision, exceptionality, communication, library science and counseling and guidance are also included. This diversity is illustrated further when looking beyond the core publications to high frequency and peripheral journals for the most recent decade. Many of these publications are of recent origin and will probably evolve as continuous core publications in future years. Another interesting phenomenon is the increasing volume of research being identified in journals published in other countries. The Alberta Journal of Educational Research, the Ontario Journal of Educational Research, and the British Journal of Educational Psychology were all classified as core. Other journals from other countries also appear as high frequency and peripheral publications.

Table 8 also illustrates one other important development relevant to production of reading research. The International Reading Association started as a professional society during the middle fifties. The three journal publications of the Association, the Reading Teacher, the Journal of Reading (formerly the Journal of Developmental Reading) and the Reading Research Quarterly, reported 291 articles on reading research for 1956-57 to 1965-66. This represents approximately 25 percent of the total production of research articles for the ten year period. The IRA has gradually assumed a major role in generating research literature in the field of reading.

THE MASTER FILE AND INFORMATION RETRIEVAL

The 4,159 messages on reading research reported in the published literature across the years of the Gray summaries constitute one element in the communication network for reading. The messages were produced by the authors and through a chain of events ended up as journal articles. Thus, on one end of the research spectrum, information is constantly being created and reported. On the other end exist the users who have need for access to the information. The gap between is extremely wide and often the proper information is never transmitted to those who could make maximum use of it. Previously, bridging the gap between the user and information has been accomplished by more traditional elements in the information transfer chain - libraries, educational institutions, professional societies, and other mechanisms. However, traditional means of information transmission are becoming less effective particularly as the production of information increases and the needs of various user groups become more specialized. This decade has witnessed phenomenal growth in the development of specialized information centers designed to supplement traditional methods of information transfer. Their functions parallel traditional library services but the centers attempt to serve requirements of a more specialized nature than those the library has been required to meet. The growth and conceptual developments underlying such centers have been succinctly outlined in texts by Kent (1965) and Meadows (1967).

The information center fills the role of a switching station with the ultimate aim of connecting the user quickly and efficiently to relevant information. The book and periodical literature on information science now contains a considerable body of practical and theoretical knowledge which would be helpful in conceiving an integrated set of functions for the establishment of such an information switching station in the field of reading. The elements in the design of such a center would include a collection of recorded information; professionals and para-professionals who would analyze, organize, store and maintain the collection; procedures for retrieval of information; and a program for publicizing the center and maintaining contact with the user group. The Master File of published research literature generated as a result of this project could be supplemented with other materials to provide a comprehensive collection on reading which could be periodically updated. Alternative indexing and classification schemes could be examined and one selected or created for application to the document file. Bibliographies on various general topics could be generated and tailor made searches also conducted in answer to specific questions from the user group. In addition to collecting the information and making it available, the center could play a significant role in generating needed analysis and integration of the research on reading. Through close liaison with the related professional groups the center could unite the information base and competent reviewers to create various analysis and state-of-the-art papers which would aid in the interpretation and application of significant research findings. Few information centers currently extend their operations to this important function in the transmission of information. The results of this project, used in conjunction with the newly created ERIC system, provide an excellent working base for the establishment of an effective information center for reading.

SUMMARY AND CONCLUSIONS

The introductory section of this report attempted to place the information crisis in some perspective and indicate the need for more systematic control and dissemination of information within education and the field of reading. The objectives of this project included: the identification and acquisition of a basic corpus of research information on reading; storage of the information on a Master File magnetic tape for computer manipulation; and analysis of the Master File to indicate some of the characteristics of the information network in reading. A corollary objective included an examination of the potential of the Master File as a basic corpus for information retrieval and suggestions as to how the results of the project could be utilized in the emerging ERIC system and the activities of ERIC/CRIER.

The identification and acquisition of the corpus of material on reading research was accomplished through use of the Gray summaries on reading assembled by the Reading Research Center of the University of Chicago. The 5,380 entries in the Gray summaries were organized and edited for paper tape input. The transfer to machine readable medium and the generation of the magnetic tape Master File were accomplished using standard equipment and routines available in any large computing facility.

The journal articles appearing in the published literature dealing with reading research were used as a base for tabulating data to define some of the salient characteristics of the information communication network in reading. Statistics indicate that there has been a gradual increase in information on reading research over the past four decades with the increase reading explosive proportions since the late 1950's. The research has been traditionally reported in short or medium size articles of one to ten pages in length rather than articles of better then ten pages in length. A significant proportion of the research has appeared in five to ten page articles and this trend appears to be continuing. There are now approximately four times as many journals reporting seven times as many articles on reading research as there were during the earlier years of the Gray summaries. The respective productive importance of the journals producing research articles was indicated by identifying core, high frequency and peripheral journals on the basis of relative volume of production. Trends in the production of core journals were identified across the years of the summaries and recommendations given for the identification of a set of contemporary core publications which could be monitored to insure the collection of significant research on reading. The statistics also reflect the increasing importance of the International Reading Association in the generation of research literature on reading. The results of this pilot project, used in conjunction with the newly created ERIC system, appear to provide an excellent working base for the establishment of an effective specialized information center for reading.

Throughout this report it has been suggested that the quantity of information produced in general, and in education and reading in particular, is increasing faster than our capability to meaningfully handle it. As the gap between the production and use of information widens, strain occurs and a great many recommendations are being made relative to new techniques and agencies which should be created to cope with the problem. This is a common theme heard increasingly throughout government, business, and industry, and the academic community and it is not too difficult to substantiate the fact that we are in an era of incredibly rapid change relative to the creation and use of information.

One of the most frequent suggestions heard is that the rate of change in the increase in information follows an exponential pattern. It is not difficult to visualize a figure with time plotted on the horizontal axis, the volume of information produced plotted on the vertical axis and the line representing the rate of change screaming off the top of the graph. Many social changes are said to be of the same nature and exponential curves make us a bit paranoid at times. We generally view the information increase as a severe problem which is "getting out of hand." The severity of the problem depends on the perspective from which it is viewed and it must be kept in mind that the increase can be both quantitative and qualitative. As techniques are developed to cope with the problem perspectives also change. Some people feel that if we can only utilize technology efficiently we can reach the millenium in a short time and all our information problems will disappear. Others feel that the situation is more evolutionary in nature and that it will take time to gradually evolve more complete and efficient techniques to organize and use information. The problem is viewed by some as being cyclical in nature with trendless fluctuations that, because of the nature of the problem, never will be predictable or completely manageable. Thus, the problem generates diverse perspectives and moves us in different directions. Each point of view has merit and others are admissible as these are not all inclusive.

In developing an information system for education a deliberately evolutionary perspective, including consideration of technological and human resources, is recommended. The thrust of the system should consider both the quantitative and qualitative aspects of the information problem. Techniques can be developed to cope with the sheer numerical increase. However, the quantitative aspects of the increase may not be as disruptive overall as the qualitative aspects and techniques should also be developed to handle the integration and analysis of information as well as to organize and report its existence. This requires development of an information system which generates a colleagueship between technical know-how and the professional expertise being served by the system. The two are interdependent and mutually supportive. The concept of the ERIC information network for education is moving in this direction and this project, having identified the published research resources for reading, can now take the next step in generating significant analysis and integration of the contents of the documents making up the data base to effect significant change in the field of reading.

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Table 9

Published research literature in reading - 1884-1924.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
American Education	1		1							
Amer. J. of Psychology	7					1	1			5
Amer. School Board J.	3	2	1							
Atlantic Ed'l. J.	1	1								
British J. of Psychology	1		1							
Chicago Schools J.	6	3	2	1						
Detroit J. of Ed.	4	1	1	2						
Education	4			3		1				
Ed'l. Administration & Supervision	6		1	3		1		1		
Ed'l. Review	3		2						1	
Ed'l. Research	1			1						
Elementary English Review	2		1	1						
Elementary School J.	46	3	7	9	7	4	4	1	2	9
Elementary School Teacher	11		3	1	2		1	3		1
English J.	3			1		1	1			
Forum of Education	1					1				
J. of Ed'l. Method	2				1				1	
J. of Ed'l. Psychology	41	1	5	5	4	3	6	4	3	10
J. of Ed'l. Research	26		3	1	4	5	5	3	2	3
J. of Experimental Pedagogy	3		1	1	1					
J. of Experimental Psychology	2			1						1
J. of Louisiana Teachers Assn.	1			1						
J. of New York State Teachers Assn.	1				1					
Midland Schools	2	1		1						
Nature-Study Review	1				1					
Peabody J. of Ed.	1				1					
Pedagogical Seminary	12	2		1	1		1			7
Popular Science Monthly	1				1					
Psychological Bulletin	2			1	1					
Psychological Clinic	7	1	1	2		1	1			1
Psychological Review	4						1	1		2
Quart. J. of Speech Ed.	1					1				
School Review	11	1		5	1		2		1	1
School & Society	32	21	8	2		1				
School World	2		1	1						
Teachers College Record	11				1					10
Training School Bulletin	1							1		
Volta Review	1								1	
Total no. articles =	265	37	39	44	27	20	23	14	11	50
Total no. journals =	38									

Table 10

Published research literature in reading - 1924-25.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. School Board J.	1	1								
College Chronical	1	1								
Elementary School J.	5			1		1	1	1		1
J. of Ed'l. Psychology	3			2	1					
J. of Ed'l. Research	5		2		3					
School Review	1								1	
School & Society	3	2		1						
Teachers College Record	8	1			2		1	2		2
Total no. articles =	27	5	2	4	6	1	2	3	1	3
Total no. journals =	8									

Table 11

Published research literature in reading - 1925-26.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Chicago Schools J.	2		1		1					
Ed'l. Administration & Supervision	1					1				
Elementary English Review	1			1						
Elementary School J.	7		2	1		2	1			1
J. of Applied Psychology	1				1					
J. of Ed'l. Method	3		1	1		1				
J. of Ed'l. Psychology	1				1					
J. of Ed'l. Research	4				1	1	2			
J. of Experimental Psychology	1									1
Pedagogical Seminary	1							1		
Public School Messenger	1					1				
School Review	2				1	1				
School & Society	3	2	1							
Teachers College Record	4				1				1	2
Teachers J. & Abstract	2			2						
Univ. of Pittsburgh School of Ed. J.	2	1	1							
Total no. articles =	36	3	6	5	6	7	3	1	1	4
Total no. journals =	16									

Table 12

Published research literature in reading - 1926-27.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Childhood Ed.	3	1		2						
Ed'l. Research Bulletin	8	3	3		1					1
Ed'l. Review	1		1							
Elementary English Review	5		2	3						
Elementary School J.	6	1		2		1		1		1
English J.	3			1	2					
J. of Ed'l. Method	1		1							
J. of Ed'l. Psychology	6		1	2		1	2			
J. of Ed'l. Research	5		2	1	1	1				
J. of Experimental Psychology	4				2					2
Libraries	1		1							
Library J.	1		1							
Modern Languages Forum	1		1							
Peabody J. of Ed.	2	1			1					
Public School Messenger	1					1				
School Review	3		2		1					
School & Society	6	5	1							
Teachers College Record	5						1			4
Univ. of Pittsburgh School of Ed. J.	2			2						
Total no. articles =	64	11	16	13	8	4	3	1	0	8
Total no. journals =	19									

Table 13

Published research literature in reading - 1927-28.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Bookman	1		1							
Calif. Quart. of Secondary Ed.	3		1							2
Catholic Ed'l. Review	1									1
Chicago Schools J.	1		1							
Education	2					1			1	
Ed'l. Administration & Supervision	1							1		
Ed'l. Research Bulletin	2			1		1				
Elementary English Review	5		3		1	1				
Elementary School J.	10	1	2	1	2	1	2			1
Iowa Library Quart.	1		1							
J. of Applied Psychology	3					2	1			
J. of Ed'l. Method	2	1					1			
J. of Ed'l. Psychology	4	1		2		1				
J. of Ed'l. Research	7		2		3	1	1			
Library J.	1	1								
New Republic	1	1								
Peabody J. of Ed.	1				1					
Progressive Ed.	1		1							
Psychological Bulletin	1									1
Psychological Clinic	3		1		1		1			
Publisher's Weekly	1	1								
School Review	1				1					
School & Society	4	2	1	1						
Survey	1	1								
Teachers College Record	5			1			1		1	2
Teachers J. & Abstract	1			1						
Total no. articles =	64	9	14	7	9	8	7	1	2	7
Total no. Journals =	26									

Table 14

Published research literature in reading - 1928-29.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Psychology	1				1					
Annals of Amer. Academy of Political & Social Science	1							1		
Calif. Quart. of Secondary Ed.	1			1						
Chicago Schools J.	2	2								
Debunker	1		1							
Ed'l. Administration & Supervision	2						1	1		
Ed'l. Method	2		1	1						
Ed'l. Research Bulletin	4	2	1	1						
Elementary English Review	3		3							
Elementary School J.	16	1	5	5	1	1	2	1		
English J.	1					1				
Forum of Ed.	1									1
Genetic Psychology Monographs	3									3
J. of Adult Ed.	1		1							
J. of Amer. Medical Assn.	1		1							
J. of Applied Psychology	5			1	2		1	1		
J. of Ed'l. Psychology	8			2	5	1				
J. of Ed'l. Research	6		1	2	1	1				1
J. of Ed'l. Sociology	1			1						
J. of Experimental Psychology	2						2			
J. of General Psychology	1									1
Mental Hygiene	1								1	
New England J. of Medicine	1			1						
Peabody J. of Ed.	3	1	1					1		
Psychological Bulletin	1				1					
Psychological Clinic	4		1	1	2					
Psychological Review	1						1			
Publisher's Weekly	1			1						
School Review	4		1	1		1				1
School & Society	5	4	1							
School & Community	1	1								
Special Libraries	1	1								
Teachers College Record	3									3
Univ. of Pittsburgh School of Ed. J.	4	1	1	2						
Virginia Teacher	1	1								
Total no. articles =	94	14	19	20	13	5	7	5	1	10
Total no. journals =	35									

Table 15

Published research literature in reading - 1929-30.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Calif. Quart. of Secondary Ed.	1			1						
Chicago Schools J.	2	1	1							
Ed'l. Administration & Supervision	1		1							
Ed'l. Method	4		1	1		1	1			
Ed'l. Research Bulletin	5		1	3	1					
Elementary English Review	1		1							
Elementary School J.	5		3	2						
English J.	1							1		
Genetic Psychology Monographs	1									1
J. of Amer. Medical Assn.	1		1							
J. of Applied Psychology	7		1	2	1	1				2
J. of Ed'l. Psychology	6			1	1	2		1		1
J. of Ed'l. Research	5	1	1		2					1
J. of Experimental Psychology	1				1					
J. of Genetic Psychology	3		1						1	1
J. of Higher Ed.	1		1							
J. of Nat'l. Ed. Assn.	2	2								
London Times Ed'l. Supplement	1		1							
Minnesota J. of Ed.	1	1								
Modern Language Forum	2	1	1							
N. Carolina Teacher	1		1							
Platoon School	1		1							
Psychological Bulletin	2	2								
Psychological Monographs: General & Applied	2									2
Publisher's Weekly	1		1							
School Review	4		2		1		1			
School & Society	6	5	1							
Teachers College J.	1							1		
Teachers College Record	1		1							
Texas Outlook	1	1								
Univ. of Pittsburgh School of Ed. J.	3		1		2					
Virginia J. of Ed.	1	1								
Total no. articles =	75	15	23	10	9	4	2	3	1	8
Total no. journals =	32									

Table 16

Published research literature in reading - 1930-31.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Psychology	3	1	2							
Amer. Schoolmaster	1	1								
Calif. Quart. of Secondary Ed.	1			1						
Chicago Schools J.	1				1					
Childhood Ed.	1		1							
Education	1		1							
Ed'l. Method	3		2	1						
Ed'l. Research Bulletin	2		1	1						
Elementary English Review	4		2	2						
Elementary School J.	15		2	2	5	1	1	3		1
High School Teacher	1	1								
J. of Applied Psychology	6		2	2				2		
J. of Education	1		1							
J. of Ed'l. Psychology	2			2						
J. of Ed'l. Research	4		2		1	1				
J. of Experimental Psychology	2				1					1
J. of Higher Ed.	3		1	2						
Library Quart.	3							2		1
Modern Language J.	1									1
New York State Ed.	1		1							
Peabody J. of Ed.	3	1	1		1					
Psychological Bulletin	1									1
Psychological Clinic	4	1	1	1						1
Psychological Review	1			1						
School & Community	1		1							
School Executives Magazine	1		1							
School Review	4		1			2		1		
School & Society	1	1								
Science Ed.	1					1				
Teachers College J.	1		1							
Teachers College Record	1					1				
Teachers J. & Abstract	1			1						
Training School Bulletin	1			1						
Univ. of Pittsburgh School of Ed. J.	1									1
Total no. articles =	78	6	24	17	9	6	1	8	0	7
Total no. journals =	34									

Table 17

Published research literature in reading - 1931-32.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
AATC Quart.	1			1						
Calif. J. of Secondary Ed.	1		1							
Education	1				1					
Ed'l. Administration & Supervision	1			1						
Ed'l. Method	2			2						
Ed'l. Outlook	1									1
Ed'l. Research Bulletin	1			1						
Elementary English Review	1	1								
Elementary School J.	10		2	3	1	3	1			
English J.	2		2							
Genetic Psychology Monographs	2									2
J. of Applied Psychology	2				2					
J. of Ed. & Psychology	2								1	1
J. of Ed'l. Psychology	3				1	1	1			
J. of Ed'l. Research	7	1	1	2	1	1		1		
J. of Ed'l. Sociology	1				1					
J. of Experimental Psychology	1									1
J. of General Psychology	1	1								
J. of Genetic Psychology	3		1				1			1
J. of Higher Ed.	1			1						
J. of Nat'l. Ed. Assn.	1	1								
Library J.	1			1						
Library Quart.	2					1				1
Mental Hygiene	1						1			
Peabody J. of Ed.	1		1							
Pedagogical Seminary	1			1						
Pittsburgh Schools	1		1							
Psychological Clinic	2		2							
School Executives Magazine	1									1
School Review	7		1	1	3	1			1	
School & Society	3	2	1							
Smith College Studies in Social Work	1									1
Teachers College Record	1									1
Total no. articles =	67	6	13	14	10	7	4	1	2	10
Total no. journals =	33									

Table 18

Published research literature in reading - 1932-33.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Arizona Teacher	1	1								
Australian Ed'l. Studies	1									1
Childhood Ed.	3	3								
Ed'l. Administration & Supervision	2			1				1		
Ed'l. Method	2			1	1					
Ed'l. Research Record	2								1	1
Ed'l. Trends	1		1							
Elementary English	1			1						
Elementary English Review	1		1							
Elementary School J.	8		3	1	2		1			1
English J.	3		1		1					1
German Quart.	1				1					
Historical Outlook	1		1							
J. of Applied Psychology	8			3	2	2	1			
J. of Ed'l. Research	5		2		1					2
J. of Ed'l. Psychology	4		3			1				
J. of Experimental Ed.	3		1	1	1					
J. of Experimental Psychology	1	1								
J. of General Psychology	2								1	1
J. of Higher Ed.	1		1							
J. of Negro Ed.	1			1						
Jr. College J.	1		1							
Library Quart.	2									2
Library J.	1		1							
Peabody J. of Ed.	1			1						
Phi Delta Kappan	1			1						
School Review	3		1		2					
School Science & Math.	1		1							
School & Society	5	3	2							
Teachers College J.	1	1								
Teachers College Record	2	1								1
Total no. articles =	70	10	20	11	11	3	2	1	2	10
Total no. journals =	31									

Table 19

Published research literature in reading - 1933-34.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
American J. of Psychology	1					1				
British J. of Psychology	1									1
Calif. Quart. of Secondary Ed.	2		1	1						
Childhood Ed.	2	1	1							
Education	1		1							
Ed'l. Administration & Supervision	2	1	1							
Ed'l. Method	2			2						
Ed'l. Trends	1			1						
Elementary English Review	4	1	3							
Elementary School J.	6		3	1	1	1				
English J.	1	1								
English Leaflet	1									1
J. of Applied Psychology	1		1							
J. of Ed'l. Psychology	8		4		1	1				2
J. of Ed'l. Research	6	1		1		1	1			2
J. of Experimental Ed.	4		2	2						
J. of Genetic Psychology	1						1			
J. of Negro Ed.	2			1			1			
Junior College J.	1		1							
Library J.	1	1								
Library Quart.	2									2
Nation's Schools	1		1							
Psychological Bulletin	1							1		
Psychological Review	1			1						
Rev. of Ed'l. Research	1		1							
School Review	4			2			2			
School & Society	5	3	1	1						
Total no. articles =	63	9	21	13	2	4	5	1	0	8
Total no. journals =	27									

Table 20

Published research literature in reading - 1934-35.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Ophthalmology	1	1								
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	1				1					
Amer. J. of Orthopsychiatry	1		1							
British J. of Ed'l. Psychology	1									1
British J. of Psychology	1									1
Calif. J. of Elementary Ed.	3	1	2							
Calif. J. of Secondary Ed.	2	1	1							
Catholic Ed'l. Review	1						1			
Ed'l. Administration & Supervision	1			1						
Ed'l. Method	1	1								
Ed'l. Research Bulletin	4		1	2						1
Elementary English Review	6		2	1	2					1
Elementary School J.	8	2	1		2		2	1		
English J.	5		1	2	1		1			
J. of Adult Ed.	1		1							
J. of Applied Psychology	5	1	2		1	1				
J. of Education	2	2								
J. of Ed'l. Psychology	6				2	1	2			1
J. of Ed'l. Research	10		2	4		2		1		1
J. of Experimental Ed.	2			2						
J. of Genetic Psychology	3						1	1	1	
J. of Higher Ed.	3		1	2						
J. of Juvenile Research	1									1
Library Quart.	4						1			3
Peabody J. of Ed.	1			1						
Pittsburgh Schools	1					1				
Psychological Bulletin	1									1
Publisher's Weekly	2	1		1						
Review of Ed'l. Research	3			1	1					1
School Review	3			2			1			
School & Society	5	4	1							
Science	1	1								
Teachers College J.	1	1								
Teachers College Record	2						1			1
Total no. articles =	93	16	16	19	10	5	10	3	1	13
Total no. journals =	34									

Table 21

Published research literature in reading - 1935-36.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Ophthalmology	1		1							
Amer. School Board J.	1		1							
Calif. J. of Elementary Ed.	3				2					1
Education	6		3	3						
Ed'l. Administration & Supervision	1									1
Ed'l. Screen	1	1								
Elementary English Review	5		2	2						1
Elementary School J.	8		1	1	3		1			2
English J.	2		1	1						
High School J.	1		1							
Illinois Medical J.	1		1							
Illinois Teacher	1			1						
Journalism Quart.	1			1						
J. of Adult Ed.	1		1							
J. of Applied Psychology	6	2					1	1		2
J. of Ed'l. Psychology	6			1	2		1		1	1
J. of Ed'l. Research	13	1	1	2	2	1	3	1	1	1
J. of Exceptional Children	1		1							
J. of Experimental Ed.	3					1				2
J. of Experimental Psychology	1									1
J. of General Psychology	2		1							1
J. of Genetic Psychology	4			1	1	1				1
J. of Higher Ed.	1			1						
J. of Industrial Hygiene	1		1							
J. of Juvenile Research	2			1		1				
J. of Psychology	1									1
Library Quart.	3									3
Modern Language J.	1				1					
Nation's Schools	1	1								
Peabody J. of Ed.	2		1			1				
Progressive Ed.	1				1					
Psychological Bulletin	1								1	
School Review	1							1		
Teachers College Record	1			1						
Training School Bulletin	1							1		
Total no. articles =	86	5	17	16	12	5	6	4	3	18
Total no. journals =	35									

Table 22

Published research literature in reading - 1936-37.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Orthopsychiatry	1					1				
British J. of Psychology	1		1							
Calif. J. of Elementary Ed.	1				1					
Chicago Schools J.	2	1	1							
Education	1			1						
Ed'l. Administration & Supervision	1									1
Ed'l. Research Bulletin	1					1				
Elementary English Review	9		5	4						
Elementary School J.	12		2	3	3	1	3			
English J.	3		1		1	1				
J. of Applied Psychology	1						1			
J. of Ed'l. Psychology	9	1	2	4	2					
J. of Ed'l. Research	5				1				2	2
J. of Exceptional Children	1									1
J. of Experimental Ed.	5	2	1		1					1
J. of Experimental Psychology	1							1		
J. of Genetic Psychology	1		1							
J. of Psychology	1		1							
Library Trends	1									1
Math. Teacher	1	1								
Mental Hygiene	1									1
Pittsburgh Schools	2									2
Psychological Monographs: General & Applied	7				2					5
Rev. of Ed'l. Research	1			1						
School Review	6		1	1	1	2			1	
Teachers College Record	3		1	1					1	
What Does Research Say?	1				1					
Total no. articles =	79	5	17	15	13	6	4	1	4	14
Total no. journals =	27									

Table 23

Published research literature in reading - 1937-38.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	1			1						
Archives of Pediatrics	1			1						
Calif. J. of Elementary Ed.	1					1				
Calif. J. of Secondary Ed.	1		1							
Chicago Schools J.	1		1							
Ed'l. Method	3		3							
Ed'l. Record	1			1						
Elementary English Review	6		2	1		1				2
Elementary School	9		1	2	3	2				1
English J.	5		2	1	1		1			
Harvard Ed'l. Review	1				1					
High Points	1			1						
J. of Applied Psychology	2					1				1
J. of Consulting Psychology	1		1							
J. of Ed'l. Psychology	10		2	2	1	2			2	1
J. of Ed'l. Research	9		1	3	2	1	1			1
J. of Experimental Ed.	2			1					1	
J. of Experimental Psychology	2			1						1
J. of General Psychology	2		1	1						
J. of Higher Ed.	1				1					
J. of Negro Ed.	1		1							
Junior College J.	2	1	1							
Library Quart.	3						2			1
Modern Language J.	1					1				
Montana Ed.	1	1								
Rev. of Ed'l. Research	2							1		1
Secondary Ed.	1		1							
School Review	5		1	2	2					
School & Society	4	3		1						
Science Ed.	1		1							
What Does Research Say?	1			1						
Total no. articles =	82	5	20	20	11	9	4	1	3	9
Total no. journals =	31									

Table 24

Published research literature in reading - 1938-39.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Ophthalmology	1			1						
Amer. J. of Psychology	1					1				
Catholic Ed'l. Review	1								1	
Catholic School J.	2	1	1							
Chicago Schools J.	1				1					
Ed'l. Administration & Supervision	1						1			
Ed'l. Forum	1		1							
Ed'l. Method	1		1							
Ed'l. Record	1									1
Ed'l. Research Bulletin	2		1	1						
Ed'l. Screen	1	1								
Elementary English Review	14	3	4	2		1	2	2		
Elementary School J.	11	1	4		3	1	1			1
English J.	6		2	1	1	1				1
High Points	1		1							
J. of Consulting Psychology	1					1				
J. of Ed'l. Psychology	6			1	1	2	1	1		
J. of Ed'l. Research	14	1	1	3	3	3	1			2
J. of Experimental Ed.	2		1		1					
J. of Experimental Psychology	2					1				1
J. of General Psychology	2	1		1						
J. of Genetic Psychology	4						1			3
J. of Higher Ed.	3	1		2						
J. of Speech & Hearing Disorders	1					1				
Library Quart.	1							1		
Math. Teacher	2	1	1							
Modern Language J.	1		1							
Nat'l. Elementary Principal	1	1								
Nation's Schools	1	1								
Orthoptist	1									1
Peabody J. of Ed.	2			2						
Pittsburgh Schools	1									1
Psychological Monographs	1									1
Quart. J. of Speech	1						1			
School Review	4			2	1		1			
School & Society	3	3								
Teachers College J.	1									1
Teachers College Record	2				2					
Texas Outlook	1	1								
Total no. articles =	103	16	19	16	13	12	9	4	1	13
Total no. journals =	39									

Table 25

Published research literature in reading - 1939-40.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Ophthalmology	1		1							
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	2		1		1					
Amer. J. of Orthopsychiatry	2					1		1		
Amer. J. of Psychology	1									1
Archives of Ophthalmology	1						1			
Calif. J. of Elementary Ed.	1		1							
Chicago Schools J.	1	1								
Child Development	2		1							1
The Clearing House	1		1							
College English	1					1				
Ed'l. Research	1									1
Ed'l. Research Bulletin	1			1						
Elementary English Review	5		2		1					2
Elementary School J.	9			1	4	2	1		1	
English J.	2		1	1						
High Points	1		1							
J. of Applied Psychology	1							1		
J. of Ed'l. Psychology	10		1	3	1	1	1	2		1
J. of Ed'l. Research	9	2	1		1	2	1	1		1
J. of Experimental Ed.	5		1	2				1		1
J. of Experimental Psychology	2		1			1				
J. of the Franklin Institute	1						1			
J. of Genetic Psychology	1						1			
J. of the Optical Society	1				1					
J. of Psychology	5			1	2				1	1
Library Quart.	2									2
Modern Language J.	2		1			1				
Nat'l. Elementary Principal	1				1					
Peabody J. of Ed.	4		1	1		1	1			
Pittsburgh Schools	4				1					3
Public School Messenger	1						1			
Rev. of Ed'l. Research	1									1
School Review	7			1	6					
School & Society	3	2	1							
Sight-Saving Review	1				1					
Social Forces	1						1			
Texas Outlook	2	2								
Total no. articles =	96	7	16	11	20	10	9	6	2	15
Total no. journals =	37									

Table 26

Published research literature in reading - 1940-41.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Psychology	1	1								
Archives of Ophthalmology	1									1
British J. of Ed'l. Psychology	1				1					
Calif. J. of Elementary Ed.	1			1						
Education	1			1						
Ed'l. Administration & Supervision	2			1			1			
Ed'l. Method	1				1					
Ed'l. Research Bulletin	2		1		1					
Elementary English Review	7		3	3						1
Elementary School J.	9		4	2	2	1				
English J	2			2						
J. of Applied Psychology	3			1	1	1				
J. of Ed'l. Psychology	6	1		2	1		2			
J. of Ed. & Psychology	1	1								
J. of Ed'l. Research	7			4	2	1				
J. of Experimental Ed.	6	1	1	3	1					
J. of Experimental Psychology	2			1				1		
J. of Genetic Psychology	3					1				2
J. of Higher Ed.	2	1	1							
J. of Negro Ed.	1			1						
J. of Psychology	3			1		1				1
J. of Social Psychology	3				1		1			1
Junior College J.	1	1								
Kansas Studies in Ed.	2			1			1			
Library Quart.	1									1
Ohio Schools	1	1								
Peabody J. of Ed.	3		1		2					
Psychological Record	2						1	1		
School Curriculum & Economic Improvement	1					1				
School Executive	1		1							
School Review	1					1				
School Science & Math.	1		1							
School & Society	7	1	6							
Studies & Summaries	1		1							
Teachers College J.	1		1							
Teachers College Record	1			1						
Wisconsin J. of Ed.	1	1								
Total no. articles =	90	9	21	25	13	7	6	2	0	7
Total no. journals =	37									

Table 27

Published research literature in reading - 1941-42.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	4				2		1			1
Amer. J. of Psychology	1		1							
British J. of Ed'l. Psychology	2				2					
Calif. J. of Secondary Ed.	1			1						
Catholic Ed'l. Review	1								1	
Chicago Schools J.	1		1							
Education	4	1	2		1					
Ed'l. Administration & Supervision	1		1							
Ed'l. & Psychological Measurement	1				1					
Ed'l. Research Bulletin	1							1		
El Paso Schools Standard	4		2	1	1					
Elementary English Review	3			1	1					1
Elementary School J.	12		3	3	1	2	3			
English J.	1			1						
Genetic Psychology Monographs	1									1
J. of Amer. Assn. of Collegiate Registrars	1						1			
J. of Applied Psychology	1	1								
J. of Ed'l. Psychology	14	1	1	5	1	1	4	1		
J. of Ed'l. Research	3	1		1		1				
J. of Experimental Ed.	8	1	4	1				2		
J. of Experimental Psychology	1									1
J. of General Psychology	2		1	1						
J. of Genetic Psychology	2			1						1
J. of Higher Ed.	1	1								
Library Quart.	3			1						2
Phi Delta Kappan	1		1							
Pittsburgh Schools	1							1		
Psychological Bulletin	1			1						
School Review	6			1	2	2				1
School & Society	2	1	1							
Science Ed.	1		1							
Teachers College Journal	2	1		1						
Teachers College Record	2				1	1				
Texas Outlook	1	1								
Total no. articles =	91	9	19	20	13	7	9	5	1	8
Total no. journals =	34									

Table 28

Published research literature in reading - 1942-43.

Journal	Total no. articles	Length of article in pages 1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Ophthalmology	1		1							
Amer. J. of Orthopsychiatry	2				1		1			
Annual Review of Psychology	1			1						
Archives of Ophthalmology	1						1			
Ed'l. Administration & Supervision	3					2	1			
El Paso Schools Standard	1									1
Elementary English	2	1				1				
Elementary School J.	9		1	4	2	2				
English J.	2			1	1					
High School J.	1				1					
J. of Applied Psychology	3		1	1			1			
J. of Ed'l. Psychology	13		2	3	3	2	2			1
J. of Ed'l. Research	16		2	3	2	2	4		1	2
J. of Exceptional Children	1			1						
J. of Experimental Ed.	4		1					2		1
J. of Genetic Psychology	1									1
J. of Psychology	1							1		
Library Quart.	1						1			
Peabody J. of Ed.	4		1	2	1					
Phi Delta Kappan	1	1								
Pittsburgh Schools	1					1				
Rev. of Ed'l. Research	3		1							2
School Review	6			4	1	1				
School & Society	1		1							
Sight-Saving Review	1	1								
Social Ed.	1	1								
Teachers College J.	1			1						
Texas Outlook	1		1							
Visual Digest	1			1						
Total no. articles =	84	4	12	22	12	11	11	3	1	8
Total no. journals =	29									

Table 29

Published research literature in reading - 1943-44.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Psychology	2	1		1						
Elementary School J.	7	1	2		1	3				
Journalism Quart.	1						1			
J. of Applied Psychology	1					1				
J. of Ed'l. Psychology	9	1	2	1	2	1	1		1	
J. of Ed'l. Research	12	1	3	2	1	2		1	1	1
J. of Experimental Ed.	1				1					
J. of Experimental Psychology	1		1							
J. of Genetic Psychology	1						1			
J. of Negro Ed.	1					1				
J. of Psychology	1					1				
Library Quart.	3			1	2					
Midland Schools	1		1							
Nat'l. Elementary Principal	1		1							
Peabody J. of Ed.	1			1						
Pittsburgh Schools	1								1	
Psychological Monographs: General & Applied	2									2
School Review	1		1							
School & Society	1		1							
Teachers College Record	2					1			1	
Texas Outlook	1	1								
Total no. articles =	51	5	12	6	7	10	3	1	4	3
Total no. journals =	21									

Table 30

Published research literature in reading - 1944-45.

Journal	Total no. articles	Length of article in pages 1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Ophthalmology	1	1								
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	1			1						
Amer. J. of Psychology	1				1					
Clearing House	1	1								
Educational Research Series	1			1						
Elementary School J.	3	1		1	1					
Genetic Psychology Monographs	1									1
J. of Applied Psychology	3	1	1			1				
J. of Ed'l. Psychology	8			1	2		3	1		1
J. of Ed'l. Research	9		1	4	1	2		1		
J. of Experimental Ed.	1		1							
J. of General Psychology	1									1
J. of Genetic Psychology	1									1
J. of Negro Ed.	1		1							
J. of Social Psychology	2							2		
Peabody J. of Ed.	1						1			
Psychometrika	1							1		
School Review	1		1							
School & Society	1	1								
Teachers College Record	1			1						
Training School Bulletin	1									1
Visual Digest	2			1	1					
Total no. articles =	43	5	5	10	6	3	4	5	0	5
Total no. journals =	22									

Table 31

Published research literature in reading - 1945-46.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Annual Review of Psychology	1								1	
Educational Leadership	1			1						
Ed'l. & Psychological Measurement	1							1		
Elementary English Review	3			2	1					
Elementary School J.	9	1	4	2	1	1				
High Points	1			1						
J. of Abnormal & Social Psych.	2			2						
J. of Amer. Assn. of Collegiate Registrars	1								1	
J. of Applied Psychology	3		1	1	1					
J. of Ed'l. Psychology	8					1	3	2		2
J. of Ed'l. Research	9	2	1	2	1	1	1			1
J. of Experimental Psychology	1			1						
J. of General Psychology	3			1					1	1
J. of Negro Ed.	1	1								
J. of Psychology	1							1		
Library Quart.	1									1
Nat'l. Elementary Principal	1		1							
Optometric Weekly	1	1								
Peabody J. of Ed.	1		1							
Psychological Bulletin	1									1
Research Quart.	1					1				
Rev. of Ed'l. Research	1							1		
School Review	1			1						
School Science & Math.	1				1					
School & Society	2	2								
Special Ed. Review	1			1						
St. Louis Public School J.	3		1	1						1
Total no. articles =	60	7	9	16	5	4	4	5	3	7
Total no. journals =	27									

Table 32

Published research literature in reading - 1946-47.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Mental Deficiency	1				1					
Amer. J. of Public Health	1					1				
British J. of Ed'l. Psychology	2								2	
The Clearing House	1		1							
Education	1			1						
Ed'l. Research Bulletin	3	1						1		1
Elementary English	2		1				1			
Elementary School J.	9		2	1	6					
High Points	2	1	1							
Journalism Quart.	4	2	1		1					
J. of Applied Psychology	6		1	3	1			1		
J. of Ed'l. Psychology	12		3	2	3	2		1		1
J. of Ed'l. Research	8		2	2	2	1				1
J. of Experimental Ed.	1			1						
J. of Experimental Psychology	4	2		1						1
J. of Higher Ed.	1	1								
The Nervous Child	1					1				
The Phoenix	1					1				
Psychological Monographs: General & Applied	1									1
Psychometrika	2		1	1						
Quart. Rev. of Higher Ed. Among Negroes	1			1						
School Review	3				2	1				
School & Society	1		1							
Scientific Monthly	1			1						
Understanding the Child	1				1					
Volta Review	1		1							
Total no. articles =	71	7	15	14	17	7	1	3	2	5
Total no. journals =	26									

Table 33

Published research literature in reading - 1947-48.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Ophthalmology	2			2						
Amer. J. of Orthopsychiatry	1			1						
Amer. J. of Psychology	2				1			1		
Amer. J. of Psychotherapy	1									1
British J. of Ed'l. Psychology	1							1		
Catholic Ed'l. Review	2			1	1					
Ed'l. Research Bulletin	3			2						1
Elementary English	3		1				1	1		
Elementary School J.	5			3		1	1			
High Points	1			1						
Illuminating Engineering	2		1					1		
Improving Ed'l. Research	4		2	2						
J. of Applied Psychology	1						1			
J. of Consulting Psychology	1				1					
J. of Ed'l. Psychology	9		2	3	1	1			1	1
J. of Ed'l. Research	12		1	2	4		1	1		3
J. of Experimental Ed.	1		1							
J. of Genetic Psychology	3								1	2
J. of Psychology	1			1						
J. of Pediatrics	1				1					
J. of School Psychology	1			1						
J. of Social Psychology	1					1				
J. of Speech & Hearing Disorders	1	1								
Library Quart.	2				1		1			
Math. Teacher	1		1							
Mississippi Ed'l. Advance	1	1								
Nat'l. Assn. of Secondary School Principals' Bulletin	1					1				
Occupations	1	1								
Optometric Assn.	1		1							
Optometric Weekly	1		1							
Optometric World	1		1							
Psychological Bulletin	1								1	
Psychological Monographs: General & Applied	1									1
School Review	2					2				
School & Society	2	1	1							
Teachers College J.	1		1							
Texas Outlook	1	1								
Virginia J. of Ed.	1		1							
Visual Digest	1		1							
Total no. articles =	78	5	16	19	10	6	5	5	3	9
Total no. journals =	39									

Table 34

Published research literature in reading - 1948-49.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Psychology	1		1							
British J. of Ed'l. Psychology	1									1
Calif. J. of Elementary Ed.	1							1		
Calif. J. of Secondary Ed.	1			1						
Ed'l. Administration & Supervision	1								1	
Ed'l. Research Bulletin	3		1		1		1			
Elementary English	7		1	2		3		1		
Elementary School J.	3		1	1	1					
Genetic Psychology Monographs	2									2
Illuminating Engineering	1								1	
Journalism Quart.	8		1	1	3	3				
J. of Abnormal & Social Psych.	1		1							
J. of Applied Psychology	6	2	1		2		1			
J. of Consulting Psychology	1			1						
J. of Ed'l. Psychology	8		1		1	1	2	3		
J. of Ed'l. Research	16	1	1	3	1	5	2			3
J. of Ed'l. Sociology	1								1	
J. of Experimental Ed.	2			2						
J. of General Psychology	2		1							1
J. of Genetic Psychology	1									1
J. of Mental Science	1									1
J. of Optical Society of Amer.	1							1		
J. of Pediatrics	2		1		1					
J. of Speech & Hearing Disorders	1					1				
Language Arts & Fine Arts Rev. of Ed'l. Research	3					2	1			
Library Quart.	2					1		1		
Nat'l. Business Ed. Quart.	1			1						
Peabody J. of Ed.	1				1					
School Review	1			1						
Sociometry	1			1						
Total no. articles =	81	3	11	14	11	16	7	7	3	9
Total no. journals =	30									

Table 35

Published research literature in reading - 1949-50.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Orthopsychiatry	1				1					
British J. of Ed'l. Psychology	5	1	2	1						1
Calif. J. of Elementary Ed.	2				1		1			
Clearing House	1		1							
Chicago Schools J.	1			1						
College English	1			1						
The Columbia Optometrist	1		1							
Education	1					1				
Ed'l. Administration & Supervision	2				1					1
Ed'l. Psychological Measurement	1			1						
Elementary English	8			1	3	2				2
Elementary School J.	8	1	1	2	4					
Journalism Quart.	6	1		2	2	1				
J. of Applied Psychology	3	1		2						
J. of Consulting Psychology	1					1				
J. of Ed'l. Psychology	5			1	1			1		2
J. of Ed'l. Research	12		1	2	3		3	1	1	1
J. of Ed'l. Sociology	3						3			
J. of Experimental Ed.	1		1							
J. of Experimental Psychology	1		1							
J. of General Psychology	1									1
J. of Genetic Psychology	1									1
J. of Personality & Social Psych.	1								1	
J. of Psychology	3				1	1				1
Peabody J. of Ed.	2		2							
Psychological Monographs: General & Applied	1									1
School Review	1				1					
School & Society	2		2							
Science	1	1								
Sociology & Social Research	1			1						
Studies in Reading	8	2					1			5
Training School Bulletin	1							1		
Total no. articles =	87	7	12	15	18	6	8	3	2	16
Total no. journals =	32									

Table 36

Published research literature in reading - 1950-51.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
British J. of Ed'l. Psychology	6	1				3	1			1
British J. of Psychology	1			1						
Calif. J. of Ed'l. Research	4	1	1	2						
Child Development	1									1
Ed'l. Research Bulletin	1				1					
Elementary English	3			1	1		1			
Elementary School J.	2		1			1				
English J.	1			1						
Handbook of Applied Psychology	1			1						
Journalism Quart.	3	1		2						
J. of Amer. Optometric Assn.	2					2				
J. of Applied Psychology	7		4	2	1					
J. of Consulting Psychology	1		1							
J. of Ed'l. Psychology	6				2	1	2	1		
J. of Ed'l. Research	7				2	1	1	2		1
J. of Experimental Ed.	1					1				
J. of Higher Ed.	1								1	
J. of Genetic Psychology	4							1		3
J. of Social Psychology	4	1		1	1	1				
Junior College J.	1			1						
Personnel Psychology	1									1
Quart. J. of Experimental Psych.	1		1							
School Review	3			2						1
School Science & Math.	1		1							
School & Society	6	1	3	1					1	
Sociology & Social Research	1					1				
Studies in Reading	4									4
Tasmanian Ed.	1								1	
Training School Bulletin	1						1			
Total no. articles =	76	5	12	15	8	11	6	4	3	12
Total no. journals =	29									

Table 37

Published research literature in reading - 1951-52.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	1					1				
British J. of Ed'l. Psychology	1							1		
Child Development	1				1					
Editor & Publisher	1	1								
Education	3			1		1		1		
Ed'l. Administration & Supervision	3				1	2				
Ed'l. & Psychological Measurement	2	1			1					
Ed'l. Research Bulletin	2			1		1				
Elementary English	6		1		4					1
Elementary School J.	5			1	2	2				
Journalism Quart.	5	1					2	1	1	
J. of Applied Psychology	13	2	4	6		1				
J. of Ed'l. Psychology	6				1	2	1	1		1
J. of Ed'l. Research	8			1	3		2			2
J. of Experimental Ed.	1				1					
J. of General Psychology	1		1							
J. of Negro Ed.	1							1		
J. of Psychology	1							1		
J. of Social Psychology	2									2
Language Arts & Fine Arts Rev. of Ed'l. Research	1						1			
Nat'l. Assn. of Secondary School Principals' Bulletin	2			1	1					
Nat'l. Ed. Assn. J.	1	1								
Peabody J. of Ed.	1				1					
Personnel	1			1						
Phi Delta Kappan	1			1						
Progressive Ed.	1			1						
Quart. J. of Child Behavior	1									1
Rev. of Ed'l. Research	1					1				
School Review	4			2	2					
School & Society	5	2	2	1						
Total no. articles =	82	8	8	17	18	11	6	6	1	7
Total no. journals =	30									

Table 38

Published research literature in reading - 1952-53.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Psychology	4	1	2	1						
British J. of Ed'l. Psychology	5	2			2	1				
British J. of Psychology	1						1			
Calif. J. of Ed'l. Research	4		1	1	2					
Catholic Ed'l. Review	1					1				
Chemical Education	1		1							
Columbia Optometrist	2		1	1						
Ed'l. Administration & Supervision	4			2		1	1			
Ed'l. & Psychological Measurement	2			1		1				
Elementary English	5		2		1	1				1
Elementary School J.	8		1	3	2		1			1
English J.	1			1						
Journalism Quart.	3		1			1				1
J. of Applied Psychology	8	2	4	2						
J. of Consulting Psychology	2		2							
J. of Ed'l. Psychology	14		3		3	3	1	1	1	2
J. of Ed'l. Research	12		4	2	2		3	1		
J. of Experimental Ed.	1					1				
J. of Experimental Psychology	3		1	1	1					
J. of Psychology	1						1			
J. of Social Psychology	1								1	
J. of Speech & Hearing Disorders	1			1						
Michigan Ed. J.	1	1								
Optometric Weekly	1			1						
Phi Delta Kappan	1		1							
Pittsburgh Schools	1									1
The Reading Teacher	2				2					
School Review	1		1							
School & Society	4	1	2			1				
Science Ed.	1		1							
Sight-Saving Review	1			1						
Total no. articles =	97	7	28	18	15	11	8	2	2	6
Total no. journals =	31									

Table 39

Published research literature in reading - 1953-54.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Mental Deficiency	1									1
Amer. J. of Ophthalmology	1				1					
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	2						1	1		
Amer. J. of Orthopsychiatry	2			1			1			
British J. of Ed'l. Psychology	3	1			1			1		
Calif. J. of Ed'l. Research	1	1								
Calif. Teachers Assn. J.	1	1								
Catholic Ed'l. Review	2				1			1		
Dr. Alagappa Training College J. of Ed. (India)	1						1			
Education	2		1				1			
Ed'l. & Psychological Measurement	8		1	2	1	1	1			2
Ed'l. Review	1			1						
Elementary English	3	2				1				
Elementary School J.	6	2	2	1	1					
Genetic Psychology Monographs	1									1
German Quart.	1	1								
Journalism Quart.	7	1	2	1	1					2
J. of Ed'l. Psychology	4		2	2						
J. of Ed'l. Research	10		1	2	1	2		2	1	1
J. of Experimental Ed.	1								1	
J. of Higher Ed.	1		1							
J. of General Psychology	2					1				1
J. of Projective Techniques	1						1			
J. of Social Psychology	1							1		
Nation's Schools	1	1								
Nervous Child	1			1						
The Reading Teacher	1			1						
School Review	1			1						
School & Society	1	1								
Speech Monographs	1		1							
Training School Bulletin	1	1								
Total no. articles =	70	12	11	13	7	5	6	6	2	8
Total no. journals =	31									

Table 40

Published research literature in reading - 1954-55.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Amer. J. of Ophthalmology	2	2								
Amer. J. of Psychology	1	1								
Archives of Pediatrics	1						1			
British J. of Ed'l. Psychology	4	1			2		1			
British J. of Psychology	1						1			
College English	5	3	1	1						
Education	1		1							
Ed'l. Administration & Supervision	2		1			1				
Elementary English	5			4	1					
Elementary School J.	9		4	3		2				
Journalism Quart.	8	1		2	1		3	1		
J. of Applied Psychology	1			1						
J. of Clinical Psychology	1	1								
J. of Communication	2		2							
J. of Consulting Psychology	2	2								
J. of Ed'l. Psychology	8		3	2	1	2				
J. of Ed'l. Research	9		1	2	2	2	2			
J. of Experimental Ed.	2	1				1				
J. of Experimental Psychology	2	1			1					
J. of General Psychology	1			1						
J. of Genetic Psychology	1									1
J. of Nervous & Mental Disease	1		1							
J. of Pediatrics	1				1					
J. of Personality	1									1
J. of Personality & Social Psych.	1					1				
J. of Projective Techniques	1	1								
J. of Psychology	1					1				
J. of Speech & Hearing Disorders	1				1					
Language Arts & Fine Arts Rev. of Ed'l. Research	2							2		
Peabody J. of Ed.	2						2			
Public Opinion Quart.	1					1				
School & Society	1	1								
Science	1	1								
Speech Monographs	1		1							
Total no. articles =	83	16	15	16	10	11	10	3	0	2
Total no. journals =	34									

Table 41

Published research literature in reading - 1955-56.

Journal	Total no. articles	Length of article in pages 1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Alberta J. of Ed'l. Research	3				1		1		1	
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	3			1	1			1		
Amer. J. of Orthopsychiatry	1			1						
Archives of Pediatrics	1							1		
British J. of Ed'l. Psychology	3				2		1			
British J. of Ed'l. Studies	1						1			
British J. of Statistical Psych.	2						1			1
Calif. J. of Ed'l. Research	2	1		1						
College English	1	1								
Ed'l. Administration & Supervision	1	1								
Ed'l. Research Bulletin	1					1				
Elementary English	9	2	5	1						1
Elementary School J.	5	2	1	2						
English J.	1		1							
High Points	1			1						
Journalism Quart.	8		1	2		3	1	1		
J. of Amer. Optometric Assn.	1	1								
J. of Applied Psychology	3	3								
J. of Consulting Psychology	1	1								
J. of Ed'l. Psychology	8	1	1	2	2	1	1			
J. of Ed'l. Research	17	2	5	4	2	1	1	1		1
J. of Genetic Psychology	2			1	1					
J. of Negro Ed.	1			1						
J. of Pediatrics	1		1							
J. of Psychology	1			1						
J. of Social Psychology	2				2					
Mart News	1		1							
Peabody J. of Ed.	1				1					
Rev. of Ed'l. Research	2					1	1			
School Review	1		1							
School & Society	4	4								
Total no. articles =	89	19	17	18	12	7	8	4	1	3
Total no. journals =	31									

Table 42

Published research literature in reading - 1956-57.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Alberta J. of Ed'l. Research	2			1					1	
Amer. J. of Ophthalmology	1	1								
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	2			1		1				
British J. of Ed'l. Psychology	5	1		2		2				
British J. of Statistical Psych.	1								1	
Calif. J. of Ed'l. Research	1		1							
Chicago Schools J.	1			1						
Clearing House	1		1							
College English	1		1							
Ed'l. Research Bulletin	1									1
Elementary English	7	3	2	1				1		
Elementary School J.	6		4	1	1					
High Points	1					1				
Journalism Quart.	2				1				1	
J. of Amer. Optometric Assn.	1				1					
J. of Ed'l. Psychology	6			3	2		1			
J. of Ed'l. Research	12		3	3			1	2	2	1
J. of Experimental Ed.	2	1		1						
J. of General Psychology	1							1		
J. of Genetic Psychology	1						1			
J. of Psychology	1						1			
J. of Social Psychology	1					1				
J. of Speech & Hearing Disorders	3		1		1		1			
Math. Teacher	1			1						
Modern Language J.	1				1					
Negro Ed'l. Review	1				1					
Peabody J. of Ed.	1					1				
Phi Delta Kappan	3		1	2						
Saskatchewan Bulletin	1		1							
School Science & Math.	1	1								
Science Ed.	1	1								
Total no. articles =	70	8	15	17	8	6	5	4	5	2
Total no. journals =	31									

Table 43

Published research literature in reading - 1957-58.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Adult Leadership	1	1								
Alberta J. of Ed'l. Research	1					1				
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	4			1	1	1		1		
American Psychologist	1	1								
Amer. Sociological Rev.	1				1					
Audio-Visual Communication Rev.	1						1			
British J. of Ed'l. Psychology	2	2								
Child Development	1			1						
Clearing House	1									1
Education	1			1						
Ed'l. Leadership	1		1							
Elementary English	8	3	3	2						
Elementary School J.	7	1	4	1	1					
English J.	5			3		1			1	
Journalism Quart.	11	1	2	3	2	2	1			
J. of Applied Psychology	3		3							
J. of Developmental Reading	3		2	1						
J. of Education	3				1					2
J. of Ed'l. Psychology	3			2		1				
J. of Ed'l. Research	18		5	8	2	1		1		1
J. of Experimental Ed.	3			1						2
J. of Psychology	1						1			
J. of Social Psychology	1			1						
J. of Social Research	1					1				
Language Arts & Fine Arts Rev. of Ed'l. Research	1						1			
Library Quart.	1				1					
Pittsburgh Schools	1									1
The Reading Teacher	1		1							
School Review	1			1						
School & Society	1	1								
Total no. articles =	88	10	21	26	9	8	4	2	1	7
Total no. journals =	30									

Table 44

Published research literature in reading - 1958-59.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Acta Otolaryng	1		1							
Alberta J. of Ed'l. Research	2			1		1				
Amer. J. of Ophthalmology	1		1							
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	3		1						1	1
Australian J. of Ed.	2	1				1				
British J. of Ed'l. Psychology	5		3	1	1					
Calif. J. of Ed'l. Research	2		1		1					
Chicago Schools J.	1		1							
College Composition & Communication	1		1							
Education	1	1								
Ed'l. Administration & Supervision	1				1					
Ed'l. Leadership	1		1							
Ed'l. & Psychological Measurement	1		1							
Elementary English	16	1	4	4	2	2	2		1	
Elementary School J.	5	1	2		2					
English J.	1		1							
Genetic Psychology Monographs	1									1
Journalism Quart.	9	1		4	2	2				
J. of Amer. Optometric Assn.	1	1								
J. of Applied Psychology	1	1								
J. of Clinical Psychology	1		1							
J. of Developmental Reading	9		2	1	1	2	2	1		
J. of Education	1									1
J. of Ed'l. Psychology	5	1	2	2						
J. of Ed'l. Research	19	4	8	3	1	2				1
J. of Experimental Ed.	2				1	1				
J. of General Psychology	2		1	1						
J. of Genetic Psychology	6	1	1			1	1	1		1
J. of Psychology	1				1					
J. of Speech & Hearing Disorders	2	2								
Psychological Bulletin	1				1					
The Reading Teacher	3	1	1	1						
School & Community	1	1								
School & Society	1	1								
Science Ed.	1	1								
Total no. articles =	111	19	34	18	14	12	5	2	2	5
Total no. journals =	35									

Table 45

Published research literature in reading - 1959-60.

Journal	Total no. articles	Length of article in pages 1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Alberta J. of Ed'l. Research	5		1	2			1	1		
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	1							1		
British J. of Ed'l. Psychology	8	2	2		2	1	1			
Calif. J. of Ed'l. Research	5	1	1	2	1					
Education	2		2							
Ed'l. Administration & Supervision	1				1					
Ed'l. Research	1					1				
Elementary English	7	1	3	1	1	1				
Elementary School J.	1		1							
Journalism Quart.	7		1	2	3		1			
J. of Applied Psychology	1		1							
J. of Developmental Reading	12		1	2	6	1	1		1	
J. of Education	2									2
J. of Ed'l. Research	13	3	2	3	4					1
J. of General Psychology	1				1					
Library Quart.	2		2							
Nat'l. Assn. of Women Deans & Counselors J.	1		1							
Ontario J. of Ed'l. Research	3			2	1					
Personnel & Guidance J.	1	1								
Phi Delta Kappan	1		1							
The Reading Teacher	10	2	3	2	2	1				
School Science & Math.	1			1						
Total no. articles =	86	10	22	17	22	5	4	2	1	3
Total no. journals =	22									

Table 46

Published research literature in reading - 1960-61.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Acta Sociologica	1								1	
Alberta J. of Ed'l. Research	3	1				1	1			
Annals of Otology, Rhinology & Laryngology	1								1	
Audio-Visual Communication Rev.	1									1
British J. of Ed'l. Psychology	3				1	1			1	
Calif. J. of Ed'l. Research	1		1							
Child Development	1									1
Education	4	1	1	2						
Ed'l. & Psychological Measurement	1							1		
Ed'l. Research Bulletin	1				1					
Elementary English	11	2	3		3	2	1			
Elementary School J.	6		4	1	1					
English J.	1							1		
Journalism Quart.	14	4	3		3	3	1			
J. of Abnormal & Social Psych.	4		3		1					
J. of Developmental Reading	18	2	9	2	1	1	2		1	
J. of Education	1									1
J. of Ed'l. Psychology	6	1	3	1	1					
J. of Ed'l. Research	16	5	7	2	1				1	
J. of Experimental Ed.	3				1	1			1	
J. of Psychology	4		1	1		1	1			
J. of Speech & Hearing Disorders	1						1			
J. of Teacher Ed.	1	1								
Language Arts & Fine Arts Rev. of Ed'l. Research	2					1		1		
Library Quart.	1						1			
Math. Teacher	1	1								
Nat'l. Assn. of Secondary Schools Principals' Bulletin	1			1						
Ontario J. of Ed'l. Research	3			1						2
Peabody J. of Ed.	1			1						
Personnel & Guidance J.	2	1	1							
The Reading Teacher	13	4	8	1						
School Science & Math.	1			1						
Science Ed.	1	1								
Univ. of Kansas Bull. of Ed.	1							1		
Total no. articles =	130	24	44	14	14	11	8	4	6	5
Total no. journals =	34									

Table 47

Published research literature in reading - 1961-62.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Alberta J. of Ed'l. Research	2			1	1					
American Imago	3					1		1	1	
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	1						1			
British J. of Ed'l. Psychology	6		2	2	1	1				
Calif. J. of Ed'l. Research	3		1	1	1					
Catholic Ed'l. Review	1				1					
Chicago Schools J.	1		1							
Editor & Publisher	4	3		1						
Education	3		1		1					1
Ed'l. Administration & Supervision	1			1						
Ed'l. & Psychological Measurement	2	1								1
Ed'l. Research Bulletin	2		2							
Elementary English	13	1	4	3	2	1			1	1
Elementary School J.	5		1	3	1					
English J.	2			1						1
Exceptional Children	3			1	1					1
High School J.	1			1						
Journalism Quart.	15		8	1	6					
J. of Abnormal & Social Psych.	11		2	3	5		1			
J. of Applied Psychology	3		1	2						
J. of Communication	3			1	2					
J. of Consulting Psychology	2		1		1					
J. of Developmental Reading	14	1	4	1	1	4	3			
J. of Ed'l. Psychology	10	1	4	2	2	1				
J. of Ed'l. Research	13	2	5	4	1					1
J. of Experimental Ed.	2			1	1					
J. of General Psychology	1						1			
J. of Negro Ed.	1		1							
J. of Speech & Hearing Disorders	2				2					
Junior College J.	2			1	1					
Library Quart.	1							1		
Perceptual & Motor Skills	3	3								
Psychological Monographs: General & Applied	1									1
Psychological Reports	2			2						
Public Opinion Quart.	3				1		1			1
Reading Teacher	15		4	7	2		1			1
Science Teacher	2		1			1				
Sociometry	1									1
Training School Bulletin	3				2	1				
Vocational Guidance Quart.	1		1							
Total no. articles =	164	12	44	40	36	10	8	2	2	10
Total no. journals =	40									

Table 48

Published research literature in reading - 1962-63.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Alberta J. of Ed'l. Research	1			1						
Amer. Biology Teacher	1	1								
Amer. J. of Mental Deficiency	2				1	1				
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	1				1					
Amer. J. of Orthopsychiatry	3	1	1			1				
Amer. J. of Psychology	2					1				1
Archives of Ophthalmology	1					1				
British J. of Ed'l. Psychology	3				2	1				
Calif. J. of Ed'l. Research	2			1		1				
Education	4		2	1	1					
Educational Leadership	1			1						
Ed'l. & Psychological Measurement	1			1						
Educational Research	1				1					
Elementary English	16		4	4	3	4			1	
Elementary School J.	9		2	7						
English J.	2		1							1
Exceptional Children	2		1			1				
Genetic Psychology Monographs	1		1							
High School J.	1			1						
Journalism Quart.	7		2	2	3					
J. of Abnormal & Social Psych.	1			1						
J. of Communication	1						1			
J. of Consulting Psychology	2				2					
J. of Developmental Reading	11		1		1	1	4	1	1	2
J. of Ed'l. Psychology	4		1	3						
J. of Ed'l. Research	23	6	6	6	3				1	1
J. of Experimental Ed.	6		3	2	1					
J. of Genetic Psychology	1					1				
J. of Negro Ed.	1				1					
J. of Psychology	1			1						
J. of School Psychology	1						1			
Mental Hygiene	1				1					
Michigan Ed. J.	2	2								
Nat'l. Assn. of Secondary Schools Principals' Bulletin	2	1				1				
Ontario J. of Ed'l. Research	3					2			1	
Perceptual & Motor Skills	3				1			1		1
Personnel & Guidance J.	2			2						
Psychological Reports	2	1					1			

Table 48 cont'd.

Published research literature in reading - 1962-63. cont'd.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
The Reading Teacher	21		11	6	3					1
School Science & Math.	1			1						
School & Society	1			1						
Science Ed.	1						1			
Training School Bulletin	1		1							
Total no. articles =	153	12	37	42	25	16	8	2	4	7
Total no. journals =	43									

Table 49

Published research literature in reading - 1963-64.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Alberta J. of Ed'l. Research	3			1	1	1				
Amer. Ed'l. Research J.	2			2						
Amer. J. of Ophthalmology	1	1								
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	1				1					
Amer. J. of Orthopsychiatry	1				1					
Amer. J. of Psychology	2			1	1					
Annual Rev. of Psychology	2									2
Audio-Visual Communication Rev.	1				1					
British J. of Ed'l. Psychology	3			1		1	1			
Calif. J. of Ed'l. Research	3	1	1	1						
Child Development	4		1	1	1					1
College of Ed. Record	1				1					
Columbia Journalism Rev.	6	1		3		2				
Education	3	1				2				
Ed'l. & Psychological Measurement	1			1						
Ed'l. Research	2		2							
Elementary English	13	4	4	3		1				1
Elementary School J.	10		1	5	3	1				
Exceptional Children	1		1							
Genetic Psychology Monographs	1									1
Gifted Child Quart.	2			1	1					
Journalism Quart.	26	8	3	6	7	2				
J. of Abnormal Psychology	1				1					
J. of Abnormal & Social Psych.	6		2	2	2					
J. of Advertising Research	7		2	5						
J. of Applied Psychology	3	1	2							
J. of Communication	2	1				1				
J. of Developmental Reading	20	1	7	1	5	3	2		1	
J. of Education	2						1			1
J. of Education & Psychology	2					1		1		
J. of Ed'l. Psychology	5		1	4						
J. of Ed'l. Research	9	4	2	2						1
J. of Experimental Analysis of Behavior	1					1				
J. of Experimental Ed.	8		1	4		1	2			
J. of General Psychology	4		1	2	1					
J. of Genetic Psychology	1	1								
J. of School Psychology	1					1				
J. of Social Psychology	1					1				

Table 49 cont'd.

Published research literature in reading - 1963-64. cont'd.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
J. of Speech & Hearing Disorders	1			1						
J. of Speech & Hearing Research	1					1				
J. of Verbal Learning & Verbal Behavior	6		2	4						
Kansas Studies in Ed.	1									1
Library Quart.	1		1							
Perceptual & Motor Skills	5		1	2			1		1	
Psychological Reports	2		1		1					
Public Opinion Quart.	9		1		2	1	3	1		1
Reading Horizons	1		1							
The Reading Teacher	28	4	15	5	3					1
Rev. of Ed'l. Research	1									1
Social Forces	1				1					
Total no. articles =	219	28	53	58	34	21	10	2	2	11
Total no. journals =	50									

Table 50

Published research literature in reading - 1964-65.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Alberta J. of Ed'l. Research	3				2	1				
Amer. Ed'l. Research J.	3		1	1		1				
Amer. J. of Mental Deficiency	2		1		1					
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	2	1	1							
Amer. J. of Orthopsychiatry	1					1				
Arithmetic Teacher	2	1	1							
British J. of Ed'l. Psychology	6	1	2	2	1					
British J. of Psychology	1								1	
Calif. J. of Ed'l. Research	5		2	1	2					
Canadian Ed. & Research Digest	1			1						
Canadian J. of Psychology	1				1					
Child Development	1							1		
Childhood Ed.	1	1								
Education	1		1							
Ed'l. Leadership	1			1						
Ed'l. & Psychological Measurement	1				1					
Ed'l. Research	2		1	1						
Elementary English	14	1	5	2	3	2				1
Elementary School J.	13	1	5	4	2	1				
English J.	1		1							
Illinois English Bulletin	1									1
Journalism Quart.	4	2	2							
J. of Abnormal & Social Psych.	2	1	1							
J. of Advertising Research	1		1							
J. of Applied Psychology	2	1					1			
J. of Communication	1			1						
J. of Consulting Psychology	1	1								
J. of Developmental Reading	4		1	1	1					1
J. of Ed'l. Psychology	10		3	4	2			1		
J. of Ed'l. Research	17	6	6	2	2					1
J. of Experimental Ed.	4		1	2	1					
J. of Experimental Psychology	3			1	1	1				
J. of Experimental Social Psych.	1						1			
J. of General Psychology	1				1					
J. of Genetic Psychology	2					1	1			
J. of Personality & Social Psych.	1			1						
J. of Psychology	2	1		1						
J. of Reading	20	2	9	6		2	1			
J. of the Reading Specialist	5		2	1		2				

Table 50 cont'd.

Published research literature in reading - 1964-65. cont'd.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
J. of Verbal Learning & Verbal Behavior	1		1							
Merrill-Palmer Quart. of Behavior & Development	1									1
Nat'l. Elementary Principal	1		1							
Ontario J. of Ed'l. Research	3				1	1	1			
Peabody J. of Ed.	2		1			1				
Perceptual & Motor Skills	9		2		5	1	1			
Phi Delta Kappan	1		1							
Psychology in the Schools	5	1	3	1						
Psychological Bulletin	1								1	
Psychological Reports	3				1			2		
Quart. J. of Experimental Psychology	1							1		
Reading Improvement	1	1								
The Reading Teacher	20	2	7	9	1					1
Rev. of Ed'l. Research	2			2						
School Management	1	1								
School Review	1					1				
Slow Learning Child	1					1				
Teacher Education	2		1					1		
Vocational Guidance Quart.	1		1							
Total no. articles =	201	25	65	45	29	17	6	6	2	6
Total no. journals =	58									

Table 51

Published research literature in reading - 1965-66.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
Alberta J. of Ed'l. Research	4		1	1	2					
Amer. Ed'l. Research J.	4				2			1	1	
Amer. J. of Mental Deficiency	5		2	1	1		1			
Amer. J. of Optometry & Archives of Amer. Academy of Optometry	2		1	1						
Amer. J. of Orthopsychiatry	1							1		
Amer. J. of Psychology	1			1						
Arithmetic Teacher	1			1						
Audio-Visual Communications Rev.	3			2		1				
British J. of Ed'l. Psychology	2	2								
British J. of Psychology	3				1	2				
Canadian J. of Psychology	1					1				
Chicago Schools J.	1		1							
Child Development	2					1				1
College English	1				1					
Education	1				1					
Education Digest	1	1								
Ed'l. Horizons	1			1						
Ed'l. & Psychological Measurement	1				1					
Ed'l. Research	2			1				1		
Elementary English	18	3	7	7		1				
Elementary School J.	8	1	3	3	1					
English J.	4			1	2					1
Exceptional Children	4	2	1	1						
Genetic Psychological Monographs	1									1
Illinois School Research	10	3	4	2	1					
Journalism Quart.	14	4	3	1	3	2	1			
J. of Advertising Research	1			1						
J. of Applied Psychology	2		1			1				
J. of Clinical Psychology	1	1								
J. of Communication	3	1				2				
J. of Consulting Psychology	1					1				
J. of Counseling Psychology	1		1							
J. of Ed'l. Measurement	4		2	2						
J. of Ed'l. Psychology	2			2						
J. of Ed'l. Research	16	3	10	2						1
J. of Experimental Ed.	1									1
J. of Experimental Psych.	4		1	2	1					
J. of Genetic Psychology	2								1	1
J. of Personality & Social Psych.	5	1	1	2	1					

Table 51 cont'd.

Published research literature in reading - 1965-66. cont'd.

Journal	Total no. articles	Length of article in pages								
		1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17+
J. of Reading	14	1	6	5		2				
J. of the Reading Specialist	9	2	3	2	2					
J. of Research in Science Teaching	1				1					
J. of Social Psychology	1			1						
J. of Speech & Hearing Disorders	1				1					
J. of Verbal Learning & Verbal Behavior	2		1	1						
Kansas Studies in Ed.	1									1
Library Quart.	2			1		1				
Mathematics Teacher	1				1					
Montana Ed.	1	1								
Nat'l. Elementary Principal	1		1							
Ontario J. of Ed'l. Research	1								1	
Perceptual & Motor Skills	5	2		2					1	
Psychology in the Schools	4	1	2	1						
Psychological Reports	6	2	1	2			1			
Public Opinion Quart.	1			1						
Reading Horizons	2				1					1
Reading Research Quart.	10		1		1					8
The Reading Teacher	45	4	27	12	1		1			
Rev. of Ed'l. Research	5						1		1	3
School Science & Math.	1		1							
Science Service Report	1			1						
Science Ed.	1		1							
Sociometry	1			1						
Speech Monographs	4		2	1		1				
Training School Bulletin	2			2						
Total no. articles =	262	35	85	68	26	16	5	3	5	19
Total no. journals =	65									

4323 SOMMERS, RONALD K., COPETAS, FLORENCE G., BOWSER, DOLORES C., FICHTER, GEORGE R., FURLONG, ANN K., RHODES, FRANK E., AND SAUNDERS, ZANE G. ''EFFECTS OF VARIOUS DURATIONS OF SPEECH IMPROVEMENT UPON ARTICULATION AND READING,'' JOURNAL OF SPEECH AND HEARING DISORDERS, 27 (FEB. 1962), 54-61. A SECOND-YEAR REPORT ON READING IMPROVEMENT RELATED TO SPEECH THERAPY.

4324 SPACHE, GEORGE D. ''EVALUATION OF EYE-MOVEMENT PHOTOGRAPHY IN READING DIAGNOSIS AND READING TRAINING,'' RESEARCH AND EVALUATION IN COLLEGE READING (EDITED BY EMERY P. BLIESMER AND OSCAR S. CAUSEY), PP. 98-106. NINTH YEARBOOK OF THE NATIONAL READING CONFERENCE FOR COLLEGE AND ADULTS. FORT WORTH, TEXASS. TEXAS CHRISTIAN UNIVERSITY PRESS, 1960. DISCUSSES THE BASIC PURPOSES SERVED BY EYE-MOVEMENT RECORDS AND REVIEWS THE RESULTS OF ''RECENT STUDIES OF VALIDITY AND RELIABILITY OF EYE-MOVEMENT PHOTOGRAPHY.''

4325 SPACHE, GEORGE D., AND TILLMAN, CHESTER E. ''A COMPARISON OF THE VISUAL PROFILES OF RETARDED AND NON-RETARDED READERS,'' JOURNAL OF DEVELOPMENTAL READING, 5 (WINTER 1962), 101-09. COMPARISON OF PERFORMANCE ON A VISUAL SCREENING BATTERY BY 114 RETARDED READERS WITH 101 ''NON-RETARDED,'' SELECTED FROM FILES OF A READING CLINIC.

4326 STAATS, CAROLYN K., STAATS, ARTHUR W., AND SCHULTZ, RICHARD E. ''THE EFFECTS OF DISCRIMINATION PRETRAINING ON TEXTUAL BEHAVIOR,'' JOURNAL OF EDUCATIONAL PSYCHOLOGY, 53 (FEB. 1962), 32-37. BEFORE LEARNING A LIST OF WORDS, ONE GROUP OF 12 KINDERGARTEN CHILDREN WAS TRAINED IN DISCRIMINATING THE SAME WORDS, A MATCHED GROUP USED THE LETTERS THAT MADE UP THE WORDS, WHILE A THIRD MATCHED GROUP HAD NO TRAINING.

4327 STAIGER, RALPH C. ''MEDICINE FOR READING IMPROVEMENT,'' JOURNAL OF DEVELOPMENTAL READING, 5 (AUTUMN 1961), 48-51. AN EVALUATION OF THE EFFECTS OF ''DEANOL'' (ADMINISTERED TO STIMULATE NEURAL ACTIVITY) ON READING ACHIEVEMENT AND ON CLERICAL SPEED AND ACCURACY. SIXTY RETARDED READERS FROM GRADE 4 TO COLLEGE WERE COMPARED TO CONTROLS GIVEN PLACEBO TABLETS.

4509 STONE, DAVID R., AND BARTSCHI, VILDA. ''A BASIC WORD LIST FROM BASAL READERS,'' ELEMENTARY ENGLISH, 40 (APR. 1963), 420-27. BASED ON WORDS USED IN THE SCOTT-FORESMAN, GINN, MACMILLAN, HOUGHTON-MIFFLIN, AND HEATH READERS, TOGETHER WITH THE DOLCH (1942) AND FRY (1960) LISTS, A COMPOSITE LIST FOR THE FIRST THREE GRADES IS DETERMINED.

4510 STRANG, RUTH. ''SCOPE OF ADOLESCENT INTERESTS,'' EDUCATION, 83 (APR. 1963), 463-67. A SUMMARY OF 16 STUDIES OF ADOLESCENTS' READING INTERESTS.

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